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DEPARTMENT OF ENERGY

10 CFR Part 609

RIN 1901-AB21

Loan Guarantees for Projects that Employ Innovative Technologies

AGENCY: Office of the Chief Financial Officer, Department of Energy.

ACTION: Final rule.

SUMMARY: On May 16, 2007, the Department of Energy (DOE or the Department) published a Notice of Proposed Rulemaking and opportunity for comment (NOPR) to establish regulations for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005 (Title XVII or the Act). Title XVII authorizes the Secretary of Energy (Secretary) to make loan guarantees for projects that “avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.” Title XVII also identifies ten categories of technologies and projects that are potentially eligible for loan guarantees. The two principal goals of Title XVII are to encourage commercial use in the United States of new or significantly improved energy-related technologies and to achieve substantial environmental benefits. DOE believes that commercial use of these technologies will help sustain and promote economic growth, produce a more stable and secure energy supply and economy for the United States, and improve the environment.

Having considered all of the comments submitted to DOE in response to the NOPR, the Department today is issuing this final rule.

EFFECTIVE DATE: This rule is effective upon [INSERT DATE OF PUBLICATION].

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I. Introduction and Background

Today's final rule establishes policies, procedures and requirements for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005 (42 U.S.C. 16511-16514). Title XVII authorizes the Secretary of Energy, after consultation with the Secretary of the Treasury, to make loan guarantees for projects that “(1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and (2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.” (42 U.S.C. 16513(a))

On May 16, 2007, the Department published a Notice of Proposed Rulemaking and Opportunity for Comment (NOPR, 72 FR 27471) to establish regulations for the Title XVII loan guarantee program. DOE held a public meeting on the NOPR in Washington, D.C. on June 15, 2007.

Section 20320(g) of P.L. 110-5, the Revised Continuing Appropriations Resolution, 2007 (P.L. 110-5) authorized DOE to issue guarantees under the Title XVII program for loans in the “total principal amount, any part of which is to be guaranteed, of \$4,000,000,000.” Section 20320(b) of P.L. 110.5 further provides that no loan guarantees may be issued under the Title XVII program until DOE promulgates final regulations that include “programmatic, technical, and financial factors the Secretary will use to select projects for loan guarantees, policies and procedures for selecting and

monitoring lenders and loan performance, and any other policies, procedures, or information necessary to implement Title XVII of the Energy Policy Act of 2005.” The regulations being finalized today fulfill that requirement.

Section 1702 of the Act outlines general terms and conditions for Loan Guarantee Agreements and directs the Secretary to include in Loan Guarantee Agreements “such detailed terms and conditions as the Secretary determines appropriate to “(i) protect the interests of the United States in case of a default [as defined in regulations issued by the Secretary]; and (ii) have available all the patents and technology necessary for any person selected, including the Secretary, to complete and operate the project.” (42 U.S.C. 16512(g)(2)(c)) Section 1702(i) requires the Secretary to prescribe regulations outlining record-keeping and audit requirements. This final rule sets forth application procedures, outlines terms and conditions for Loan Guarantee Agreements, and lists records and documents that project participants must keep and make available upon request.

II. Public Comments on the NOPR and DOE’s Responses

DOE received comments on the NOPR from 47 interested parties. Twenty interested parties presented oral comments and/or submitted written comments for the record at the public meeting. DOE summarizes below the major areas of the NOPR on which it received public comment, and discusses the Department’s responses to those comments. Only major areas of the NOPR are discussed here, although DOE carefully reviewed all comments it received on the NOPR, and in some cases made adjustments to the rule text that are not discussed at length in this preamble.

A. Technologies

A principal purpose of the Title XVII loan guarantee program is to support “innovative technology” projects in the United States that “employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.” (42 USC 16513(g)(2)) Section 1701(1) (A) of the Act defines “commercial technology” as “a technology in general use in the commercial marketplace.” (42 USC 16511(1)(A))

Title XVII does not require, but on the other hand does not prohibit, different treatment for different eligible technologies or projects in the Title XVII program. Furthermore, the Act does not explain or define the phrase “new or significantly improved” in section 1703(a)(2), nor does it explain or define the terms “general use” or “commercial marketplace.” In the NOPR, DOE proposed to define the term “new or significantly improved technology” to mean “a technology concerned with the production, consumption, or transportation of energy, and that has either only recently been discovered or learned, or that involves or constitutes one or more meaningful and important improvements in the productivity or value of the technology.” (72 FR 27480)

Because Title XVII focuses on encouraging and incentivizing innovative technologies not already in “general use” in the U.S. commercial marketplace, DOE stated in the NOPR that the Title XVII loan guarantee program should only be open to projects that employ a technology that has been used in a very limited number of U.S. commercial projects or used in a commercial project for only a limited period of time. Therefore, DOE proposed two possible ways of interpreting “general use”: it could mean “ordered for, installed in, or used in five or more commercial projects in the United

States,” or “in operation in a commercial project in the United States for a period of five years, as measured beginning on the date the technology was commissioned on a project.” (72 FR 27480) DOE requested comment on these alternatives, and also on whether the same definition should apply to all types of projects and technologies eligible for loan guarantees. (72 FR 27474) As DOE stated in the NOPR, a project may be eligible for a Title XVII loan guarantee if it uses technology that has been used in any number of projects and for any period of time outside the United States, so long as the technology is not in “general use” in the United States.

1. Definition of New or Significantly Improved Technology

Public Comments:

Section 609.2 of the proposed regulations defined “new or significantly improved technology” to mean “a technology concerned with the production, consumption or transportation of energy, and that has either only recently been discovered or learned, or that involves or constitutes one or more meaningful and important improvements in the productivity or value of the technology.” Several commenters expressed the view that this definition is too narrow because it does not include improvements in “new systems or system integration.” Other commenters stated that the definition should reference or include the term “commercial use.” Some commenters stated that the definition was appropriate.

Parson & Whittemore Incorporated (P&W) and Forest Energy System, LLC (FES), for example, assert that the proposed definition of new or significantly improved fails to capture the potential value of ‘systems’ rather than individual technologies. They

recommend expanding the definition to include improvements from new systems or systems integration. (P&W at 1; FES at 1)

The Nuclear Energy Institute (NEI) and Bechtel Corporation (Bechtel) challenged the NOPR's proposal to require that the technology be both new or significantly improved and not in general use in the commercial marketplace in the United States. They maintain that Title XVII only requires that a technology be new or significantly improved "as compared to" commercial technologies in service in the U.S. at the time the guarantee is issued. (NEI at 25; Bechtel at 5).

The Verenium Corporation (Verenium) stated that it is possible that a technology has been in existence for some time but has never been commercially applied for some reason, such as a technology that was not viable when competing with oil at \$20 a barrel but is competitive with oil at \$60 a barrel. Verenium stated that DOE should focus on technologies "not yet in" use and therefore should make the definition of New or Significantly Improved Technology refer to the defined term "Commercial Technology." (Verenium at 10).

The Union of Concerned Scientists (UCS), however, stated that "DOE needs to develop objective criteria to demarcate 'new' or 'significantly improved' technologies from the sprucing up and recycling of current technologies," and asserted that the approach of the NOPR relied upon "subjective judgments concerning the definition rather than employing more objective, quantitative measures of novelty and significant improvement." (UCS at 1) UCS did not, however, offer any suggestions as to what sort of "objective, quantitative measures of novelty and significant improvement" would be appropriate for adoption in the rule. TXU Generation Development Company LLC

(TXU) argued that the rule should adopt a “flexible definition” with DOE and expert consultants making decisions on particular technologies at the preliminary application stage. (TXU at 7).

Eastman Chemical Company (Eastman) supported the NOPR’s proposed disqualification of projects solely in the research, development, or demonstration phase as long as the criteria is applied “to the overall project and does not make a project ineligible just because one subsection of technology is new.” Eastman adds: “Arguably, a use of proven or commercial technologies in a new or novel configuration, combination, or implementation method, such as polygeneration should qualify as a ‘new or significantly improved technology.’” (Eastman at 3).

Beacon Power Corporation (Beacon) recommends broadening the definition by adding the following italicized phrase so that the definition would read: “technologies concerned with the ...productivity or value of the technology *or an improvement over an existing technology that will perform the same function.*” (Beacon at 3). Ameren Services Company (Ameren) supported the proposed definition of new or significantly improved technologies, subject to the addition of the following phrase: “in service in the United States at the time the guarantee is issued,” which is part of the statutory definition in §1703(a)(2) of the Act (Ameren at 2).

DOE Response:

There is no one universally accepted or agreed upon definition of the term “technology.” Generally, technology is thought to be the practical application of science to industrial or commercial objectives. Technology may also include electronic or digital products and systems considered as a group. DOE believes that the term “technology” in

Title XVII was intended to have a very broad meaning, given the purposes of Title XVII, and therefore does not believe it is advisable to set down by rule a narrow definition of what will be considered a “technology” for purposes of this program.

However, the Department believes it is important to establish what may enable a particular technology to be considered “new or significantly improved”. By its explicit terms, the Title XVII loan guarantee program is not open to all technologies and projects, but only those that are new or significantly improved in comparison to commercial technologies in use in the United States.

Several commenters asserted that the proposed definition of “new and significantly improved technology” in the NOPR mistakenly requires that in order to be eligible for a loan guarantee, a project must employ a technology that is both new and improved and is not in commercial use in the United States. They argue that the regulatory definition should be clarified to make clear that the test is new or significantly improved *as compared to* commercial technologies in service in the United States. They correctly quote Title XVII, but are mistaken as to the import of that language and the language in the NOPR. Either a technology is in general use in the U.S. commercial marketplace or it is not. If it is in general use, then the same technology could not possibly be “new or significantly improved” in comparison to technology in general use in the U.S. commercial marketplace, and it is ineligible for a Title XVII loan guarantee. Yet a technology does not automatically become eligible for a Title XVII loan guarantee merely because it is not a U.S. commercial technology; rather, it must be “new or significantly improved” in comparison to such commercial technology. If the statute required only that it be “new” or “different” in comparison to commercial technologies,

then it might well be that in order to become eligible for a Title XVII guarantee, all a project sponsor would need to show is that it was using a technology currently not in commercial use in the United States. But such an interpretation of Title XVII would render as surplusage the words “or significantly improved” in section 1703(a)(2) of the Act. As a result, the term “new or significantly improved” cannot simply mean not currently in commercial use in the United States; it must mean that the technology itself is either newly developed, or it must constitute a significant improvement over technologies currently in U.S. commercial use. Notably, in order to be eligible for a loan guarantee a technology need not be *both* new and significantly improved, but must only be one or the other.

DOE does believe it is useful to clarify that while a “new” technology must be newly developed, discovered or learned, a “significantly improved” technology may in fact be “old” but a significant improvement over technologies currently in commercial use in the United States. Thus, and as noted in the NOPR, DOE agrees with the assertions by some commenters that a technology could be eligible for a loan guarantee even if it was developed long ago and even if it is used in the same commercial application outside the United States, as long as that technology is not in general commercial use for that application in the United States at the time the loan guarantee is issued. Consistent with DOE’s interpretation of section 1703(g)(2) of the Act, section 609.2 of the final rule provides, in part, as follows:

New or significantly improved technology means technology concerned with the production, consumption or transmission of energy that is not a commercial technology, and that has either: (i) only recently been developed, discovered or learned; or (ii) involves or constitutes one or more meaningful and important improvements in productivity or value, in comparison to commercial technologies in the United States at the time the Term Sheet is issued.

2. Definition of Technologies in General Use

Public Comments:

Under section 1703(a)(2) of the Act, projects are eligible for Title XVII loan guarantees only if they employ new or significantly improved technologies as compared to “commercial technologies” that are “in service in the United States” when guarantees are issued. Section 1701(1)(A) defines “commercial technology” to mean “a technology in general use in the commercial marketplace.” The NOPR proposed two alternative definitions of “general use”: A technology would be considered to be in “general use” if it had been “ordered for, installed in, or used in five or more [commercial] projects in the United States”; or alternatively, if it had been “in operation in a commercial project in the United States for a period of five or more years as measured beginning on the date the technology was commission[ed] on a project.” This definition is important because, as noted above, a proposed technology cannot qualify a project for a Title XVII loan guarantee if it is in “general use” in the U.S. commercial marketplace.¹

Several commenters stated that the first of the alternatives set forth in the NOPR was acceptable, but the second alternative definition should not be an option or should be revised. On the other hand, several commenters stated that the second alternative definition would be appropriate for nuclear projects because the early operational phase is more useful in determining whether a technology is workable and acceptable. Other commenters stated that the second alternative should not be adopted because it likely would lead to a very large number of nuclear projects being eligible for loan guarantees

¹ Notably, the existence of technology in a project that is in general commercial use in the United States does not in itself *disqualify* a project from eligibility for a Title XVII loan guarantee. Most if not all projects that are eligible for loan guarantees will employ some technologies that are in such general use.

since there is a long period of time between initiation of work on a nuclear generation facility and the completion of five years of operation, and during this time a large number of projects using the same technology could apply for and be granted loan guarantees. Still other commenters were of the view that it is impossible to adequately define “general use” and asserted that DOE therefore should approve or disapprove loan guarantee proposals to use technologies on a case-by-case basis. Commenters also expressed the view that the two alternative definitions for “general use” should be combined into one definition.

More specifically, in their joint comments Constellation Nuclear Utilities, Inc., Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. (Nuclear Utilities) asserted that for nuclear technologies the definition of a technology that is in “general use” should be based upon five or more years of operation of any given new design (*e.g.*, an advanced reactor design that is separately certified by the Nuclear Regulatory Commission (NRC)). They argued that if DOE were to use the “five or more projects” alternative for defining what constituted “general use,” it would be essential that the phrase “order for, installed in, or used in” should be changed to “ordered for, installed in, and used in,” since for nuclear plants, ordering would take place many years before use. (Nuclear Utilities at 19-20). NEI, Dominion Resources Services, Inc. (Dominion) and Excelsior Energy, Inc. (Excelsior) submitted similar comments. (NEI at 24, Dominion at 12, Excelsior at 2-3).

Southern Company Services, Inc., (Southern) stated that technology should be considered in “general use” when financing has been established for five or more projects in the United States. Southern stated that its proposed interpretation of “general use”

would assist DOE's effort in having a broad portfolio of large and small projects with a wide variety of technologies supported by the Title XVII program, because it would limit the number of project participants that employ the same technology. Southern also asserted that the successful implementation of five projects employing a particular technology should greatly reduce the concerns of the credit markets, and stated that not considering a technology to be in "general use" until it has been in operation in a commercial project in the United States for five years could result in an unlimited number of projects utilizing the same technology. (Southern at 1).

Verenium stated that if over a five-year period a technology has been used in fewer than five projects, the technology is probably not in general use because it would indicate there is some barrier to competitiveness. The restriction to five projects, according to Verenium, should be stated as only a "presumption," so that DOE could deviate from it in appropriate circumstances. Verenium further argued that the term "ordered for" may be ambiguous, and thus suggested the use of "in the process of being installed" if DOE adopts an alternative employing this concept, and thus suggested the following language for the definition of Commercial Technology:

"Commercial Technology means a technology in general use in the commercial marketplace in the United States, but does not include a technology solely by use of such technology in a demonstration project funded by DOE. A technology is presumed to be in general use if it has been installed or used or is in the process of being installed in five commercial projects in the United States."

(Verenium at 12-13).

Standard & Poor's (S&P) stated that projects involving integrated gasification combined cycle (IGCC) and coal-to-liquids (CTL) technologies currently lack a commercial track record and therefore would be assigned a risk premium by that rating

agency. However, S&P said that if there are at least five operational projects using a particular technology, and as long as there was a material track record of operations, the perceived risk and thus the risk premium associated with the technology would be substantially reduced. (S&P at 2). The Iogen Corporation (Iogen), believes that the definition proposed in the NOPR is too restrictive and notes that the financial community has displayed great reticence to providing debt financing at reasonable commercial rates for new technologies that have not been widely demonstrated. Iogen would prefer that DOE not adopt a single “bright line” test and that the Department instead rely on market forces to determine the need for a guarantee. However, if the Department is going to develop a test, Iogen proposes to combine the two alternatives into one modified definition, so that a particular technology would be considered to be in general use if it had been installed or used in five or more projects in the United States for a period of five years. (Iogen at 2-3).

The Coal Utilization Research Council (CURC) stated that the “proposed definition of general use is not suitable as it relates to projects that will use technologies that have been in commercial use for other applications,” and that “size, process configurations, and technology modifications are among the several general characteristics of projects that need to be considered when applying the general use definition.” (CURC at 5). Baard Energy L.L.C. (Baard) proposed that, with respect to CTL projects, “general use” should be defined by the first alternative set forth in the NOPR, *i.e.*, technologies that have been installed and used in five or more commercial projects in the United States. Baard asserts that the second alternative, five years, is too short. In order to accommodate construction schedules for CTL plants and to allow for

innovations and improvements, Baard maintains that the second alternative should be extended to ten years. (Baard at 3).

Bechtel Power Corporation (Bechtel) recommends combining the two alternatives for determining “general use” proposed in the NOPR, as follows:

The technology or combination of technologies have been ordered for, installed in, and used in five or more projects in the U.S., each for a period of five years, measured from date of commissioning.

Bechtel’s other comments regarding “general use” are focused on new nuclear technologies that have never been built in the United States. According to Bechtel, the technologies in question (“Gen III” and “Gen III+” nuclear designs) should be judged individually for purposes of determining whether either of the alternative meanings of “general use” proposed in the NOPR apply to them. Bechtel states that the “general use” language in the rule must clearly distinguish new generations or new applications of a technology such as Gen III or Gen III+ in order to assure that they are not excluded from loan guarantee eligibility by the fact that over 100 nuclear plants have been built in the United States, when those plants used different designs and were constructed in a much different industry and regulatory environment. (Bechtel at 4).

CPS supports the second alternative definition set forth in the NOPR, and submits that the five to seven year construction period for a nuclear project means that starting the “clock” from the time the technology is commissioned on a project, may mean that the project is disqualified at or prior to the technology’s in-service date. CPS asserts that guarantees should be available, to the extent of appropriations, until each distinct technology is in full commercial operation. (CPS at 7). Abengoa Bioenergy New Technologies (ABNT) recommends that DOE select the definition which utilizes time

from first commercialization as the basis for defining “general use.” ABNT argues that if the other alternative is selected, DOE will be discouraging competition and applications from a number of projects which are eligible under a given solicitation or invitation, and that by determining eligibility on the basis of “a fixed window of time,” DOE will provide certainty that a project will remain eligible for a loan guarantee at some future time regardless of intervening events with other projects or technologies. ABNT does not dispute the NOPR’s proposal of a five-year time frame, but suggests that a superior approach may be to establish a time frame according to the commercial technology defined in each solicitation or invitation. (ABNT at 1).

DOE Response:

DOE agrees with concerns expressed by many commenters about the “five project” alternative proposed in the NOPR. These commenters were concerned that a definition that did not include an operational component, which lenders need to develop confidence that a technology is proven and is viable in actual commercial operation, may not be workable for this program, and may not result in effective reduction of commercial risk and effective increased commercial marketplace acceptance prior to the closing of loan guarantee program eligibility. DOE believes that other entities considering incorporation of a particular technology into their planning want to see technologies proven in actual practice before investing substantial sums on that technology and incorporating it into large-scale capital expenditure plans. Furthermore, operational experience reduces risk from the standpoint of the credit and debt markets, and can lead to increased access to capital markets at lower rates. We particularly note and find persuasive S&P’s comment that if there were at least five operational projects in a

particular technology within the United States, the perceived risk premium associated with the technology should be substantially reduced. We also note that adoption of the “five projects” proposal in the NOPR but without including an operational period could result in technologies or projects involving very long development and construction times being disqualified from receiving additional loan guarantees before even one project had commenced commercial operations, or in extreme cases, before any projects employing the technology had even commenced construction.

After review and evaluation of the comments, DOE accordingly has revised section 609.2 of the NOPR as follows:

Commercial Technology means a technology in general use in the commercial marketplace in the United States at the time the Term Sheet is issued by DOE. A technology is in general use if it has been installed in and is being used in three or more commercial projects in the United States, in the same general application as in the proposed project, and has been in operation in each such commercial project for a period of at least five years. The period shall be measured, for each project, starting on the in service date for the technology on that particular project. For purposes of this section, commercial projects include projects that have been the recipient of loan guarantees from DOE under this program.

DOE believes this definition reasonably addresses the concerns that DOE considers persuasive. By referring to the “same general application” as the proposed project, the definition provides that a technology is not necessarily considered in “general use” if it has been used for completely different projects or applications than in the proposed project. For example, the fact that fuel cells have been used in some small-scale applications for flashlights would not disqualify an application for a project that proposed to use fuel cells to power a motor vehicle. The definition also makes clear that it is only use of a technology in a project in the United States that can potentially render it in “general use” for the purposes of this program. The definition provides that each of three

projects using a particular technology must be in service for five years before the technology is considered to be in general use. Thus, this definition deals with the concern expressed by some commenters that technologies should be barred from program eligibility only if there has been substantial actual operational experience with them. Finally, the definition clarifies that projects that have received loan guarantees *will* be counted when determining whether technologies have been used in a sufficient number of projects to render them no longer eligible for the program. DOE believes this is consistent with the overall purpose of the program in encouraging the introduction of new and improved technologies into the commercial marketplace, but ensuring that technologies do not remain forever dependent on loan guarantee support in order to be commercially viable. The Title XVII program should help introduce technologies to the commercial marketplace, but it should be up to those technologies and to the commercial marketplace as to whether the technologies continue to be economically and technologically viable, or not.

DOE notes that even though the definition of "commercial technology" it is adopting in this rule may permit multiple projects using the same technology to be eligible for a Title XVII guarantee, DOE is under no obligation to seek authority for, or to issue solicitations for, all or any particular technology that may fall within the outer limits of eligibility for a loan guarantee, as that eligibility is prescribed by Title XVII and this rule. Indeed, it is perfectly possible that DOE may decide not to issue a solicitation covering a certain technology, even though projects using that technology would be eligible under this rule for a loan guarantee. Furthermore, this definition of "commercial technology" in no way limits DOE's ability to include within a solicitation a selection

criterion, and assign a weighting for that criterion, based on the number of projects already in service using that technology.

3. Nuclear Generation Projects

Public Comments:

Comments from the nuclear industry asserted that regulations proposed in the NOPR were not appropriate or workable for commercial nuclear power projects because of the size and unique regulatory and litigation-related risks surrounding these projects. The industry's stated primary concern is the ability of industry participants to access the capital markets at what they view as reasonable rates, terms and conditions.

CPS Energy (CPS), on behalf of itself and the Large Public Power Conference, a group of utility companies with nuclear power facilities, recommended that new nuclear technology should be defined separately and differently from other technologies eligible for Title XVII loan guarantees. CPS cited two principal factors supporting this recommendation: (1) the capital intensive nature of new nuclear development; and (2) the different technologies proposed represent vastly different scales of new technology, as compared with other types of eligible projects. CPS stated that the cost of new nuclear generating capability is in the neighborhood of \$2,000 per kilowatt and the capacity of the plants is in excess of 1,300 megawatts, that five different reactor technologies are being proposed, and that none of the technologies currently are in operation in the United States. Therefore, CPS asserted that each of the five technologies should be treated as a distinct new technology eligible for loan guarantees. (CPS at 7).

Iogen, however, strongly opposed DOE making the loan guarantee program more favorable for larger projects involving electricity generation from nuclear power or coal

combustion/gasification than for other types of projects, such as those that would advance the President’s “20 in Ten” initiative, which Iogen said depends on the widespread deployment of advanced biofuels refineries. (Iogen at 1). The American Council on Global Nuclear Competitiveness (ACGNC) stated that DOE should look beyond nuclear power plants when defining the term “advanced nuclear energy facilities” that appear in section 1703 of the Act. ACGNC stated that this language is broad enough to allow DOE to issue loan guarantees to projects that will restore the domestic nuclear energy design, manufacturing, service and supply industry, such as uranium mining and milling operations; uranium conversion and enrichment facilities; reactor component fabrication facilities; and used fuel recycling plants. (ACGNC at 2-3). Goldman and Sachs & Co. (Goldman Sachs) recommended that the final rule expressly include nuclear power generating stations and advanced technology low enriched uranium (LEU) production facilities in the definition of what could constitute an eligible project. Goldman Sachs emphasized that the described facilities are essential to fostering the domestic development of emissions-free, affordable base-load nuclear power generation, and that advanced nuclear energy facilities are one of the ten categories of projects specifically addressed in the Act. (Goldman Sachs at 5).

DOE Response:

Nuclear projects were the only type of projects for which some commenters asserted the final rule should accord different treatment than other technologies. However, most if not all of those comments argued that different treatment was appropriate because of the very large cost and long construction and permitting/licensing time for such projects. And yet, similar arguments could be made in support of some

other types of potentially eligible projects, such as refineries, IGCC facilities, or CTL projects. No commenters argued that nuclear technology *per se* makes nuclear projects deserving of different and more favorable treatment than the final rule affords to other projects that have large capital requirements and difficult regulatory environments. Moreover, DOE believes it has dealt appropriately with many if not most of the concerns expressed by nuclear industry participants regarding the issues of “general use” and other matters discussed elsewhere in this preamble and in the final rule text. Therefore, the final rule does not differentiate between nuclear power generation projects and all other projects.

B. Financial Structure Issues

The Act imposes certain limitations on the financial structure of proposed projects, including that a loan guarantee “shall not exceed an amount equal to 80 percent of the project cost of the facility that is the subject of the guarantee as estimated at the time at which the guarantee is issued.” (42 U.S.C. 16512(c)) Section 1702(g)(2)(B) of the Act further requires that “with respect to any property acquired pursuant to a guarantee or related agreements, [DOE’s rights] shall be superior to the rights of any other person with respect to the property.” In the NOPR, the Department interpreted this statutory provision to require that DOE possess a first lien priority in the assets of the project and other assets pledged as security, and stated that because DOE believed it is not permitted by Title XVII to adopt a *pari passu* security structure, Holders of the non-guaranteed portion of a loan or debt instrument supported by a Title XVII guarantee would have a subordinate claim to DOE in the event of default.

DOE proposed in the NOPR that it only would issue a guarantee for up to 90 percent of a particular debt instrument or loan obligation for an Eligible Project. This limitation was subject to the overriding statutory requirement that DOE's guarantees for a particular project could not exceed 80 percent of Project Costs. Furthermore, in connection with any loan guaranteed by DOE that may be participated, syndicated, traded, or otherwise sold on the secondary market, DOE proposed to require that the guaranteed portion and the non-guaranteed portion of the debt instrument or loan be sold on a pro-rata basis. In the NOPR, DOE proposed not to allow the guaranteed portion of the debt to be "stripped" from the non-guaranteed portion, *i.e.*, sold separately as an instrument fully guaranteed by the Federal government.

The Act does not mandate a specific equity contribution to a project that receives a Title XVII loan guarantee, but DOE proposed in the NOPR that in order to receive a loan guarantee, Project Sponsors must have a significant equity stake in the proposed project. DOE solicited comments on the merits of adopting a minimum equity percentage requirement for projects, and stated that in evaluating loan guarantee applications, the Department would consider whether and to what extent a Project Sponsor will rely upon other government assistance (e.g., grants, tax credits, other loan guarantees, *etc.*) to support financing, construction or operation of a project.

Finally, DOE proposed to require with submission of an application for a loan guarantee a "credit assessment" for the project without a loan guarantee from a nationally recognized rating agency, where the size and estimated cost of the project justify such an assessment. Additionally, DOE proposed to require that not later than 30 days prior to closing, Applicants must provide a "credit rating" from a nationally recognized rating

agency reflecting the Final Term Sheet for the project without a Federal guarantee. The Department requested comments as to whether it should establish a project size (dollar) threshold below which DOE could waive the credit assessment and rating requirements.

Public Comments:

1. Lender Risk, Stripping and *Pari Passu*

Commenters that addressed the 90 percent, no stripping, and *pari passu* provisions in the NOPR were generally opposed to these restrictions. S&P commented on the 90 percent guarantee limitation in combination with the stripping prohibition stating that “[t]his is the provision [sic] that has the greatest credit consequence. The rating associated with a partially guaranteed obligation will be substantially lower than the ‘AAA’ rating of a fully guaranteed instrument . . . [and] will result in a significantly higher cost of debt for the project than if it was fully guaranteed.” (S&P at 5). S&P also stated that “[t]he disadvantage created by the partial guarantee can be overcome if the loan can be ‘stripped’, effectively creating two tranches of debt, one with a ‘AAA’ rating and the second rated much lower.” (S&P at 5).

NEI asserted that allowing 90 percent guaranteed loans, instead of placing the limit at 80 percent as did the August 2006 Guidelines, did not improve what NEI viewed as a limitation adversely affecting the overall viability of the Title XVII program for nuclear projects. NEI stated that the NOPR would create a financing structure that is not workable. It would create, according to NEI, a hybrid loan facility for which there is no market, a debt instrument with a guaranteed portion and a non-guaranteed portion which cannot be stripped, and would render the unsecured, non-guaranteed portion of the debt “quasi-equity.” The impact, according to NEI, would be to compromise project

economics, increase debt service requirements, and increase costs to electricity consumers.

NEI further said if DOE's proposal were adopted, the Title XVII loan guarantee program would not operate like other successful Federal loan guarantee programs. NEI stated that those other programs generally provide for 100 percent Federal guarantee coverage of the loan amount; allow *pari passu* treatment of non-guaranteed commercial debt; and permit stripping of guaranteed debt from non-guaranteed debt and follow standard practice in determining eligible project costs. NEI said that DOE's NOPR was deficient on all four of these issues. (NEI at 2-3).

In a set of joint comments, Citigroup, Credit Suisse, Goldman Sachs, Lehman Brothers, Morgan Stanley and Merrill Lynch (Investment Bankers) stated that investors or lenders in the fixed income markets will be acutely concerned about a number of political, regulatory and litigation-related risks surrounding nuclear power, including the possibility of delays in commercial operation of a completed plant. The Investment Bankers also stated that these risks, combined with the higher capital costs and longer construction schedules of nuclear plants, as compared to other electric generation facilities, may make lenders unwilling to make long-term loans to such projects on commercially viable terms. (Investment Bankers at 1).

The Nuclear Utilities also stated that the Title XVII loan guarantee program must guarantee debt through workable financing instruments. They asserted that limiting guarantee coverage to 90 percent, prohibiting *pari passu* security structures, and prohibiting "stripping," would result in a program that would not support the financing of new nuclear plants in the United States. The Nuclear Utilities said that their primary

concern relates to the percentage of a project's debt the loan guarantee will cover. They believe that DOE would be fully justified in guaranteeing 100 percent of a Guaranteed Obligation, up to 80 percent of project cost. Moreover, the Nuclear Utilities stated that providing 100 percent guarantee coverage of a debt instrument is not only necessary because commercially viable financing is not available on a non-guaranteed basis, but also because a 100 percent U.S. government guarantee will enable lenders and borrowers to maximize the efficiency of the existing, well-established marketplace for government guaranteed debt. The Nuclear Utilities also believe that the "no stripping" requirement combined with the prohibition on *pari passu* security structures, creates a form of "hybrid" debt for which there is no natural, existing market. According to the nuclear industry, the market participants would incur a significantly higher average cost of financing, as well as unnecessary transaction costs to achieve project structures that would enable the project's debt to be placed with its appropriate constituents in the existing marketplace. The Nuclear Utilities stated that such structures could lead to a form of "synthetic" stripping that undercuts the purpose of the no stripping requirement. (Nuclear Utilities at 5-8). They recommended that any concern about lender due diligence should be addressed by DOE retaining outside legal, technical, and financial experts to supplement its internal expertise in performing the necessary project due diligence and assessing project risks, and that the reasonable costs and expenses of these experts should normally be borne by the sponsors and constitute part of project costs. (Nuclear Utilities at 10-11).

The Investment Bankers expressed views that are generally consistent with those of the Nuclear Utilities. They also noted that in some cases, investors in the AAA

government-guaranteed market are restricted, legally or otherwise, from investing in the sub-debt market. They said that requiring investors to own interests through a mandated hybrid instrument in both AAA paper and deeply subordinated “quasi-equity” paper removes both of these financing instruments from their natural market. (Investment Bankers at 1). The Investment Bankers stated that “[t]here is a deep and highly efficient market for ‘AAA’ government guaranteed paper. Investors in that market are distinctly different from those investors who participate in the sub-debt market. Requiring investors to own interests through a mandated hybrid instrument in both AAA paper and deeply subordinated ‘quasi-equity’ paper removes both of these financing instruments from their natural markets.” (Investment Bankers at 1). The 100 percent Government guaranteed debt instruments are purchased by investors who are more risk averse. Investors in non-guaranteed debt instruments are willing to take more risk for the prospect of greater returns on their investments. Verenum also expressed concern about the 90 percent guarantee limitation and the prohibition on “stripping” that are similar to the concerns expressed by the Investment Bankers and the Nuclear Utilities. (Verenum at 4). Verenum suggested that one alternative to 100 percent guarantees would be to allow the non-guaranteed loan to be repaid on a shorter amortization schedule than the guaranteed loan. (Verenum at 6).

According to JP Morgan Securities, Inc. (JP Morgan) it is unclear how lenders would fund the non-guaranteed portions of a partially guaranteed loan on which stripping was prohibited since banks rarely lend for tenures beyond eight to ten years, particularly when the debt is subordinated. JP Morgan further stated that an expectation that lenders would maintain the non-guaranteed portions for the life of such loans is unrealistic, and

that by taking a second lien interest, a lender's participation is tantamount to an equity investment. (JP Morgan at 1).

Bechtel contended that a commercially viable market does not exist for a hybrid instrument for which stripping is barred. Eliminating stripping, according to Bechtel, is not in line with other Federal loan guarantee programs and would increase the cost of project debt by eliminating a bank's ability to utilize various securitization vehicles, such as the Private Export Funding Corporation (PEFCO) or Govco, Inc., the special purpose lending vehicle of Citigroup, which provide efficient and cost effective vehicles to fund federally guaranteed loans. Bechtel further agreed that the first lien requirement in the NOPR is inconsistent with established norms in project lending and that the Export Import Bank of the United States, the Overseas Private Investment Corporation, and the Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) program at the Department of Transportation treat any non-guaranteed debt as *pari passu* in terms of both payment and security. (Bechtel at 2).

Power Holdings of Illinois LLC (Illinois), however, supported the 90 percent loan guarantee limitation in the NOPR, and the proposed prohibition on stripping. (Illinois at 1). Baard also agreed with the 90 percent limitation. Baard said that this limit was an improvement over the 80 percent of debt instrument guarantee limit set forth in the August 2006 Guidelines, and that it would be an effective mechanism for ensuring that investors/lenders perform rigorous due diligence prior to committing their money for a project. (Baard at 5).

2. Equity Requirements for Project Sponsors

Almost all parties that submitted comments on this issue were opposed to a fixed numeric minimum equity requirement. Illinois agreed with the concept that Project Sponsors should be required to have a significant equity stake in a project, but said DOE should not adopt a fixed, numeric minimum equity percentage, threshold, or requirement. Illinois asserted that equity structure in a given project can vary with a number of factors, including technology used and the market for the project's products, and that imposing a fixed, numeric minimum equity percentage threshold or requirement for projects that might for good reason fall below such a threshold could result in the exclusion of otherwise worthy projects. (Illinois at 2). NEI also stated that DOE should not mandate a specific minimum equity percentage for eligible projects. The appropriate debt/equity ratio, according to NEI, will vary across technologies and sectors and among projects, and should be determined by project economics. (NEI at 23). Bechtel offered similar comments. (Bechtel at 2).

3. Other Governmental Assistance

Most parties commenting on this issue stated that other governmental assistance to a project should be considered beneficial to the project and to DOE, and should not be used to exclude projects from consideration for the Title XVII program or regarded as a negative factor when evaluating the merits of particular projects. With respect to DOE's consideration of the "extent the Applicant will rely on other federal and non-federal governmental assistance" (section 609.7(b)(9) of the proposed regulations), Iogen agreed that this factor should be considered, but a primary consideration should be whether there was significant private equity involvement in a proposed project. Iogen stated that under no circumstances should Federal government assistance be counted toward any equity

contribution requirement. Iogen agreed that DOE should include Federal government assistance only as an evaluation factor, and not as one of the six disqualifying conditions listed at section 609.7(a) of the proposed regulations because, among other things, government assistance reduces total project costs, thus reducing the size of any loan guarantee, increases the likelihood of debt repayment, allows DOE to better leverage its participation in a variety of projects, and is an indicator of strong political and community support. Iogen also stated that presence of Federal government assistance does not, in itself, limit the level of private commitment. For example, Iogen stated that a project with 20% federal assistance, a 50% loan guarantee, and 30% equity, could reasonably be preferred over a project with an 80% loan guarantee and 20% equity. (Iogen at 4-5).

Bechtel stated that multiple forms of governmental assistance should not be a negative factor because tax and other incentives are intended to be complementary, not exclusive, and multiple forms of governmental assistance could enhance a project's economics and creditworthiness. Therefore, Bechtel asserted that subsidy costs should be adjusted to reflect the reduced risk of default where there are multiple forms of governmental assistance. (Bechtel at 6). The Nuclear Utilities also expressed the view that other forms of governmental assistance should be viewed positively. (Nuclear Utilities at 20-23). CURC stated that if a project obtains other forms of governmental assistance, the cost of the loan guarantee should be adjusted to reflect the reduced risk of default on the underlying debt obligation as a result of the other support. CURC said that DOE should not limit a project's ability to receive more than one form of federal assistance. (CURC at 5).

4. Credit Assessment and Rating Requirements

The NOPR proposed that a project sponsor must obtain a preliminary credit assessment and subsequent credit rating for a project without a loan guarantee from a recognized credit rating agency. (609.6(b)(21) and 609.9(f)). Most commenters that expressed a view on this issue stated that a credit assessment or rating was not very useful, and too expensive and that a better value could be obtained from entities other than established rating agencies.

USEC Inc. (USEC) stated that it does not understand the purpose of proposed § 609.9(f) which required that applicants obtain a credit rating from a nationally recognized rating agency reflecting the final term sheet without a Federal guarantee. USEC said that such a requirement would add to the cost of the application process with little benefit since the credit rating agencies are ill-equipped to evaluate the technical risks associated with new or emerging technologies. USEC stated that credit rating agencies look to historical data—not clearly relevant to new or emerging technologies. On the other hand, USEC said that DOE is positioned to conduct such an evaluation on its own with the other information provided in the application. (USEC at 5).

S&P stated that the credit assessments provided at the time of application will likely have to be limited to a rating category (with the ‘+’ and ‘-’ signs that normally accompany S&P ratings), because project documentation will likely be in a very preliminary state at this point. (S&P at 8). Goldman Sachs recommended that the requirement for a credit assessment as part of the application submission be eliminated from the final rule although sponsors should be able to elect to obtain a credit assessment as part of their application submission if they wish to do so. Goldman Sachs stated that

obtaining a credit assessment is a long process that “frequently consumes valuable time and resources during the most critical stages of negotiation.” Also, Goldman Sachs asserted that “the primary rating agencies often do not provide a final rating until all documents have been negotiated and closing is imminent” and that the rating will “be highly dependent on the existence of the loan guarantee, and thus a rating without the guarantee will be of little substantive value.” (Goldman Sachs at 9).

FES and P&W proposed that DOE set a project cost threshold of \$25 million for waiving the credit rating requirement. (FES at 3, P&W at 2). Illinois also stated that DOE generally should have authority to waive any credit rating requirement. However, according to Illinois, a simple project size threshold for waiving the requirement would oversimplify the circumstances under which DOE would consider such waivers. Illinois stated that rather than a simple project size threshold, DOE should set forth other criteria, such as a ratio of project debt to sponsor equity, the duration of the loan guarantee or the credit subsidy cost, in addition to the project size. (Illinois at 2).

DOE Response:

1. Lender Risk, Stripping and *Pari Passu*

The primary goals of the Title XVII loan guarantee program are to encourage and incentivize the commercial use in the United States of new or significantly improved energy-related technologies and to achieve substantial environmental benefits.

Sections 609.10(d)(3), (4) and (13) of the NOPR provided, in sum, that (1) DOE could guarantee no more than 90 percent of any debt instrument for an eligible project, (2) the guaranteed portion of any debt instrument could not be stripped from the non-guaranteed portion, and (3) DOE must have a first lien on all project assets pledged as

collateral for a guaranteed loan. The vast majority of comments DOE received were in opposition to those provisions.

DOE is persuaded by the comments it received that identified a number of problems and difficulties with proposed sections 609.10(d)(3) and (4), and therefore is revising those sections in the final rule. Because the program focuses on innovative technologies, for which there often is not readily available private market financing at reasonable terms, and thus there is not always a readily available commercial market substitute for debt that does not receive a Title XVII guarantee, DOE has determined that an alternative approach is more appropriate.

Sections 609.10(d)(3) and (4) now provide that DOE may guarantee up to 100 percent of the amount of a loan for a project that receives a Title XVII loan guarantee, so long as all loan guarantees DOE issues for a particular project do not exceed 80 percent of Project Costs, which is a limitation imposed by Title XVII itself. As provided in the NOPR, section 609.7, DOE will evaluate the extent to which the requested amount of the loan guarantee, and the requested amount of guaranteed obligations are reasonable, relative to the nature and scope of the project.

In accordance with Federal credit policy, DOE will issue 100 percent loan guarantees only if the loan is issued and funded by the Treasury Department's Federal Financing Bank. DOE also will issue loan guarantees for loans from private lenders where the guarantee sought is for less than 100 percent of the loan amount, and the final rule provides that if DOE guarantees 90 percent or less of a Guaranteed Obligation, the Eligible Lenders and other Holders will not be prohibited from separating the guaranteed portion from the non-guaranteed portion of the debt instrument. Thus, in cases where a

lender issues a loan and receives a guarantee for more than 90 percent of the loan amount, the non-guaranteed portion cannot be stripped from the guaranteed portion.

If a loan is not 100 percent guaranteed, it can be obtained from an approved Eligible Lender. Moreover, if 90 percent or less of a loan is guaranteed by DOE, the Department is allowing Eligible Lenders and other Holders to strip the guaranteed portion of a Guaranteed Obligation from the non-guaranteed portion. DOE believes that in such circumstances, DOE still will gain the benefit of private sector debt market underwriting, but at the same time will ensure that Eligible Projects are able to obtain necessary financing, and be able to do so on reasonable terms.

In the unique context of loan guarantees for innovative energy projects, DOE believes that the changes made from the NOPR will assist projects in obtaining financing on reasonable terms. DOE recognizes that Federal credit policy generally encourages Federal credit programs to require that guaranteed obligations have a non-guaranteed portion. As noted above, the program focuses on innovative technologies for which there is often not readily available private market financing at reasonable terms, and thus there may not always be a readily available commercial market substitute for debt that does not receive a Title XVII guarantee. Therefore, the Department has concluded that these terms are necessary and appropriate to carry out the purposes of this program.

DOE has determined that it should allow stripping on some partially guaranteed loans – i.e., only those on which DOE has guaranteed 90 percent or less of the Guaranteed Obligation. As noted above, the Title XVII program presents a unique situation -- one in which loan guarantees will be issued for projects that otherwise might

have little or no access to financing on reasonable terms, primarily because of the innovative nature of the eligible technologies and projects.

Where DOE guarantees more than 90 percent of the amount of a Guaranteed Obligation, the guaranteed portion cannot be stripped from the non-guaranteed portion of the loan. In such situations, DOE is concerned that there may not be a sufficient amount of non-guaranteed debt to cause reasonable and appropriate debt market due diligence being performed.

DOE notes that several of the commenters cited other Federal credit programs as justification for removing taxpayer protections proposed in the NOPR; in several cases Title XVII is significantly different from the programs cited. For example, financing under the TIFIA program is statutorily limited to 33 percent of eligible project costs, and therefore there is significant equity and lender participation. The Title XVII program is likely to be extremely large, with \$4 billion of loan volume already provided under the 2007 Continuing Resolution, and \$9 billion requested in the 2008 President's Budget. DOE already has pre-applications from the first solicitation requesting in excess of \$25 billion in loan guarantees. The Title XVII program involves advanced technologies, which by nature are riskier than technologies already in commercial operation.

DOE believes its resolution of the issues addressed above will help ensure that eligible projects of all sizes can gain access to credit on reasonable terms. DOE is concerned about project access to capital markets at reasonable interest rates and on reasonable terms and conditions, and believes that the modifications it has made to the regulations in this final rule address the commenters' concerns, while reducing the chance that unnecessary risks and costs are placed on the Federal taxpayers.

It is customary and common practice in project financing for multiple lenders to enter into a *pari passu* structure with respect to assets pledged as collateral to secure debt. If such a structure were employed for the Title XVII program, DOE, pursuant to its Loan Guarantee Agreement, and lenders that held non-guaranteed debt, could share proportionately in the proceeds from the sale of project assets pledged as collateral if there were a default and the collateral was sold. In the NOPR, DOE interpreted Title XVII's requirement that DOE have a superior right to project assets pledged as collateral to prohibit *pari passu* structures, and as requiring all other lenders to be subordinate to DOE.

In the final rule, DOE has modified its regulations to provide that DOE and the Holders of the non-guaranteed portion of the Guaranteed Obligations may share the proceeds received from the sale of project assets. The Department interprets the Title XVII provision requiring DOE to have a superior right to project assets pledged as collateral to mean that DOE retains superior rights within the meaning of the statute even if the Department shares the proceeds from the sale of project assets with the Holders of the non-guaranteed debt as long as DOE controls the disposition of all project assets. Under this interpretation, it is solely within DOE's authority to determine whether, and under what terms, the project assets will be sold at all. For example, DOE retains – as a superior right – the ability, even over the objections of other parties, to decide against the liquidation of project assets and instead to complete construction of the project, subject to appropriations, or to sell an incomplete project to an entity that will complete the project.

The Department views this interpretation as being consistent with section 1702(g)(2)(A) of the Act, which provides that if DOE makes a payment on the

guaranteed debt, the Department is subrogated to the rights of the Holder, including the right to “complete, maintain, operate, lease, or otherwise dispose of any property acquired pursuant to such guaranteed or related agreements, or permit the borrower . . . to continue to pursue the purposes of the project.” The Secretary cannot do any of those things unless the Secretary owns or controls the entire project. There is no provision, for example, for the Secretary to purchase the interest of the non-guaranteed lenders or holders of debt that is not supported by a Title XVII guarantee. Furthermore, section 1702(g)(2)(B) provides that the rights of the Secretary, with respect to any property acquired pursuant to a guarantee or related agreements, shall be superior to the rights of any other person with respect to the property, and this provision limits DOE’s rights to the collateral to “property acquired pursuant to a guarantee.”

Insofar as it is applicable here, the Department reaffirms the view it expressed in 1980 in connection with the loan guarantee program for alternative fuels, that while DOE is required under section 1702(g)(2)(B) to have a first lien on all project assets, the Department is not prohibited from negotiating and agreeing with parties about how the proceeds from the sale of collateral will be shared. Section 19 of the Federal Nonnuclear Energy Research and Development Act of 1974, Loan Guarantees for Alternative Fuel Demonstration Facilities, Pub. L. No. 93-577, as amended, (Alternative Fuels Act), contained provisions similar to section 1702(g)(2)(B). Section 19(g)(2) of the Alternative Fuels Act provided, in part, that:

The rights of the [Secretary] with respect to any property acquired pursuant to such guarantee or related agreements shall be superior to the rights of any other person with respect to such property.

In the preamble to the final rule implementing section 19(g)(2) of the Alternative

Fuels Act and in response to arguments by commenters concerning the issue of *pari passu* sharing of the project collateral, DOE stated as follows:

Subsection 796.11(a)(9) of the proposed regulation required that the guaranteed loan not be subordinate to any other loan for the project and that the guaranteed loan be in a first lien position with respect to assets of the project and other collateral which are pledged as security for repayment of the guaranteed loan. DOE construes the Act to require this, and that only with regard to assets not directly related to the project, but which may be pledged as collateral, may a less than first lien position be acceptable to DOE.

(45 FR 15468, 15471).

DOE today adopts the same interpretation of Title XVII as it adopted in regard to nearly identical language in section 19(g)(2) of the Alternative Fuels Act. Thus, DOE interprets the language in Title XVII as requiring a first lien on all project assets, but as allowing DOE to treat assets pledged to secure a project loan that are not project assets the same as project assets. Consistent with the regulations concerning the disposition of proceeds from the sale of assets pursuant to the Alternative Fuels Act (section 796(f) and (k)), section 609.15 of today's final rule also provides that where DOE only guarantees a portion of a Guaranteed Obligation, the Secretary may enter into inter-creditor or other arrangements to share the proceeds from the sale of project collateral with lenders or other holders of the non-guaranteed portion of the Guaranteed Obligation. DOE may, at the discretion of the Secretary, share the proceeds from the sale of collateral. DOE is limited, however, to no greater than a pro rata share for the non-guaranteed Holder. However, in cases where DOE guarantees 100 percent of a loan, the loan must be issued to and funded by the Federal Financing Bank. In those circumstances, DOE will have a first lien priority on project assets pledged as collateral and all other debt for the project at issue must be subordinate to the Guaranteed Obligation.

2. Equity Requirements for Project Sponsors

Title XVII does not itself impose any minimum equity contribution requirement on projects that receive Title XVII loan guarantees. Section 1702(c) provides that DOE can guarantee loans for no more than 80 percent of the cost of a project, but does not place any requirements on where or how a Project Sponsor may obtain other funds for an Eligible Project. Nonetheless, in the NOPR, the Department explained that DOE believed it was prudent to require Project Sponsors to have a substantial equity stake in a project before the project could receive a Title XVII loan guarantee. Thus, DOE proposed (in section 609.7(a)(6) of the proposed regulations) that applications would be denied if “[t]he applicant will not provide a significant equity contribution.”

Most commenters agreed that the regulations should contain an equity contribution requirement, and that the regulations should not set a fixed numeric minimum equity percentage threshold or requirement. Commenters said some projects might have good reasons for not meeting some numeric threshold, and that a specific numeric threshold might result in the rejection of otherwise meritorious projects. Some commenters objected even to DOE requiring by rule that projects have a “significant” equity contribution.

A Title XVII loan guarantee will be offered only to projects where the project sponsors make a significant equity contribution toward the Project Cost. If private investors or project sponsors do not see fit to make any significant equity investment in a capital project, it is hard to see why DOE should back loans for the project with a Federal guarantee. Such projects might well be appropriate for grant money or research and development assistance, but in light of the overall purposes of Title XVII and the

statutory requirement that DOE can issue loan guarantees for no more than 80 percent of project cost, the Department believes it would not be prudent to eliminate any equity requirement for the program. It is in the interest of the Federal government to ensure that borrowers have a significant equity interest in the assets to ensure the financial success of the project. Eliminating the requirement might result in project sponsors financing a project entirely through a combination of government-backed loans, and other loans and government assistance. The Department does not believe such an approach would be consistent with the establishment of an overall sound Title XVII program.

Furthermore, DOE will consider the type and degree of equity contribution proposed for an eligible project for a Title XVII loan guarantee to determine whether such contribution is significant and meets the eligibility requirements for a loan guarantee agreement. In evaluating whether a borrower or project sponsor is contributing significant equity to a project, the Department will consider “equity” to be cash contributed by the Borrowers or other principals. Equity does not include proceeds from the non-guaranteed portion of any debt supported by a Title XVII loan guarantee or from any other non-guaranteed debt. The value of other forms of government financial assistance or support also does not constitute “equity.” The Department has set forth this definition of “equity” in section 609.2 of the final rule..

At the same time, DOE agrees with commenters that the Department should not by regulation establish a specified numerical minimum on the equity contribution to an Eligible Project. There likely will be a myriad of financing arrangements and differing circumstances for the disparate types of technologies and projects potentially eligible for Title XVII loan guarantees. The Department believes, based on the record before it, that

it should not set at this time a numerical minimum for the equity contribution to an eligible project.

The determination of the significance of the equity contribution cannot practicably be made at the time that the loan application is filed. Thus, DOE has revised section 609.7(a)(6) of the NOPR which stated that an Application will be disqualified if “[t]he applicant will not provide a significant equity contribution” by deleting the words “a significant” and inserting the word “an.” DOE has retained section 609.7(b)(7) which provides that DOE will consider “[t]he amount of equity commitment to the project by the Applicant and other principals involved in the project” when evaluating Applications for Title XVII loan guarantees. DOE will evaluate the amount of equity that will be contributed to a project when evaluating a project against other projects. Section 609.10(d) of today’s final rule, however, provides that the Project Sponsors must, at a minimum, have a significant equity investment in a project.

3. Other Governmental Assistance

Section 609.7(b)(9) of the NOPR provided that DOE will consider “whether and to what extent the Applicant will rely on other governmental assistance” when evaluating Applications for Title XVII loan guarantees. In the NOPR preamble, the Department noted that the receipt of other government assistance generally would be viewed negatively. (72 FR 27476)

Several commenters stated that DOE should consider other governmental assistance as a positive and not a negative evaluation factor. As noted above, those commenters asserted that the receipt of other assistance from Federal, state or local governments should be viewed as indicating support for a project and thus adding to its

commercial viability, rather than reflecting financial and commercial weakness. Most commenters that expressed a view did believe that it would be appropriate for DOE to at least consider the receipt of other government assistance in evaluating Applications. *See e.g.* Bechtel at 6, Eastman at 3; and Goldman Sachs at 9.

DOE has retained section 609.7(b)(9) in the final rule as it was proposed in the NOPR. As DOE stated in the NOPR, we recognize that in certain circumstances, multiple forms of Federal assistance to the same project could enhance important national energy policy priorities. We believe the current language in section 609.7(b)(9) is sufficient to address these circumstances.

4. Credit Assessment and Rating Requirements

Section 609.6(b)(21) of the NOPR required the Applicant to submit with its Application a credit assessment for the project without a loan guarantee “where the size and estimated cost of the project justify such an assessment.” Section 609.9(f) of the NOPR proposed to require that not “later than 30 days prior to closing, the applicant must provide a credit rating from a nationally recognized rating agency reflecting the Final Term Sheet for the project without a Federal guarantee.”

Most commenters complained that the rating agency requirements proposed in the NOPR would impose unnecessary costs and burdens on project sponsors, with little corresponding benefit to the Department. (Bechtel, at p. 2-3) Other commenters suggested that the requirement for a credit assessment be eliminated from the final rule. (*e.g.* Goldman Sachs at p. 9) Two commenters proposed a threshold of \$25 million for waiving the credit rating requirement. Another expressed the view that DOE should be able to waive the requirement where appropriate. Two commenters thought that a waiver

should not depend on project size, but rather should depend on other factors as well such as the ratio of project debt to sponsor equity.

DOE has retained the credit assessment and rating requirement provisions, 609.6(b)(21) and 609.9(f). DOE believes that these requirements will be beneficial in aiding the Department when it determines the credit subsidy scores for particular projects, and when it assesses and evaluates the risks and benefits of particular projects.

DOE notes the distinction between the credit rating on the overall project debt which lenders or project sponsors may wish to obtain for pricing the debt; and the credit rating without considering the benefit of the guarantee, which will inform DOE's evaluation of the project and estimation of the Credit Subsidy Cost.

DOE agrees that in some circumstances, it may be desirable to waive a credit rating requirement. For example, projects for which project costs fall below a certain level may not warrant the cost of a credit rating, should the cost prove large in comparison to the overall cost of the project. Therefore, in the final rule DOE has added to section 609.9(f) the following language: "where the total Project Cost for an Eligible Project is projected to exceed \$25 million." The Department selected this number because it believes any project that costs below that amount may find it uneconomic to obtain a credit rating and to participate in the Title XVII program. By putting this threshold in place, DOE seeks to support smaller projects.

C. Project Costs

Sections 609.2 and 609.12 of the proposed regulations defined "Project Costs" as those costs, including escalation and contingencies, that are necessary, reasonable, customary, and directly related to the design, engineering, financing, construction,

startup, commissioning and shake down of an Eligible Project. Conversely, costs excluded from the definition of Project Costs included initial research and development costs, the Credit Subsidy Costs, any administrative fees paid by the Project Sponsors, and operating costs after the facility has been placed in service.

Public Comments:

As noted above, the Department intends to implement Title XVII through the “self-pay” authority provided in the Act. Thus, DOE has no current intention to seek appropriations to pay for the Credit Subsidy Costs of any Title XVII loan guarantees, but rather project sponsors will be required to pay those costs before DOE enters into a loan guarantee agreement. Pursuant to FCRA, the Credit Subsidy Cost reflects the net present value of the estimated payments to or from the Government. It is impossible to tell at this point what the Credit Subsidy Cost will be for any particular project.

Most commenters argued that Credit Subsidy Costs and Title XVII administrative fees that are paid by a project sponsor should be treated as Project Costs. These commenters maintain that the exclusion of Credit Subsidy Costs and administrative fees from Project Cost is inconsistent with the treatment of similar costs in commercial project financing and in other Federal programs. These commenters also state that there is no provision in either FCRA or in OMB Circular No. A-129 that prohibits the inclusion of these costs in a project’s financing package. They contend that the inclusion of such fees or costs in the financing package neither increases project risk, nor diminishes the reasonable prospect of repayment of the loan. (See *e.g.* NEI at pp. 18-19; Nuclear Utilities, at p. 18; and FES at p. 2)

TXU similarly supported the inclusion of Credit Subsidy Costs and administrative fees in total Project Costs and supported making them eligible, at least in part, for the federal loan guarantee. TXU added that total project costs should include 100 percent of the costs to bring a plant into commercial operation, including all financing and start-up costs. (TXU at 7).

S&P, however, took a different position from most commenters, and asserted that DOE's proposed definition of the project's total costs is consistent with general market practice, except that, if projects obtain a guarantee from a monoline insurer, the premium paid for such a wrap is generally included in the total cost of the project to be financed. However, its exclusion here appears consistent with the intent of [Title XVII], namely to prevent the subsidy fee itself from potentially becoming a taxpayer liability in the event of default. (S&P at 2).

USEC also asserted that Credit Subsidy Costs and administrative fees should be counted as Project Costs. USEC's comments also identified other costs that should be specifically considered to be Project Costs. These include: general and administrative costs; performance incentives paid to employees or officers working on the project (because the project is benefiting from the increased performance); research, development, and demonstration costs that are directly related to the project; and expenses incurred after start-up. USEC said that by excluding potentially large, post-start-up costs, DOE would essentially be requiring an additional equity investment by the project sponsor. USEC argued that DOE should allow these costs as part of Project Costs and evaluate them on a case by case basis when reviewing the economics of a project. (USEC at 6-7).

Beacon recommended that the final rule allow “as an option” the inclusion of Credit Subsidy Costs and administrative fees in the definition of Project Costs. Beacon said that such costs could pose a substantial burden on small businesses and development stage companies unless they are included in Project Costs. (Beacon at 1). Goldman Sachs also recommended that Project Costs be defined to include Credit Subsidy Costs and the administrative cost of issuing a loan guarantee. Goldman Sachs further recommended that Project Costs be defined to include the costs of administrative services provided by affiliates; development expenses; pre-completion operation and maintenance costs; and costs of procurement and testing. Project financings, according to Goldman Sachs, customarily cover all costs associated with the construction of the project, including fees and expenses. To require the project sponsor to cover these costs, in Goldman Sachs’ view, would either eliminate the non-recourse nature of the financing or mean that the lenders would have to cover these amounts with a non-guaranteed loan. Moreover, whereas the proposed rule states that the loan guarantee will cover only principal and interest, Goldman Sachs asserted that the loan guarantee should cover all borrower obligations, including without limitation default interest and post-petition interest, reimbursement of letter of credit drawings, prepayment premiums, payments under interest rate hedging agreements, fees, expenses, and indemnification payments. Goldman Sachs said this would be consistent with the definition of “obligations” in project finance loan agreements. (Goldman Sachs at 6). Ameren too opposed the NOPR’s exclusion of certain categories of costs from the definition of Project Costs. The NOPR, in Ameren’s view, does not explain why the excluded categories are less suitable

for a guarantee and Ameren said that the exclusions are “not conducive to encouraging innovation.” (Ameren at 3-4).

DOE Response:

For any project that is granted a Title XVII loan guarantee, the Credit Subsidy Cost and administrative costs charged by DOE, are costs that must be paid by the borrower and are necessary terms and conditions of receiving the guarantee. As stated in the S & P comments, the DOE position is consistent with the intent of Congress to require such costs be paid by the borrower. Allowing these fees to be included in the Project Costs would increase the amount of debt that could be supported by a Title XVII loan guarantee. As funding is fungible, allowing the Credit Subsidy and Administrative Costs to be financed with the Title XVII loan guarantee could in effect transfer these costs to the taxpayer in the event of default. Furthermore, consistent with the requirements of P.L. 110-5 and as in the NOPR, the final regulations prohibit a Borrower from paying any Title XVII Credit Subsidy Cost with funds obtained from the Federal government, or from a federally guaranteed loan.

While some commenters asserted that other Federal agencies permit items such as Credit Subsidy Costs or similar expenses and administrative fees to be covered by the Federal guarantee issued pursuant to their loan guarantee programs, the Credit Subsidy Cost under Title XVII reflects the subsidy cost of the loan guarantee, as defined in FCRA. It is important to note that this is not comparable to the fees cited in comments which may offset, but do not reflect the explicit subsidy cost for the individual loan guarantee.

To the extent commenters recommended other costs that are not specifically listed in the final regulations for inclusion in the definition of eligible Project Costs, the Department rejects those comments. The Department sees no adequate basis for further revising the rule's definition of Project Costs except as otherwise provided in the final rule.

However, DOE again stresses, just as it did in the NOPR, that the purpose of the Title XVII Loan Guarantee Program is to foster the deployment of qualified innovative technologies that would reduce or sequester air pollutants or anthropogenic greenhouse gas emissions; it is not to assist or support high-risk research into or development of new technologies. Nor is it to assist in the ongoing commercial operations of successful projects. Therefore, costs related to the initial research and development of a new technology or to operating costs will not be accepted as Project Costs for purposes of such guarantees.

D. Solicitation

Section 609.3 of the proposed regulations required DOE to issue a solicitation to start the process of accepting, reviewing, and ultimately granting applications for Title XVII loan guarantees. This section also set forth certain minimum requirements for each solicitation, including the fees that would be required of persons invited to submit Applications and the criteria that the Department would use to weigh competing Pre-Applications and Applications and to make ultimate selections for loan guarantees. The proposed regulations set forth programmatic, technical, and financial factors, including the percentage of the loan guarantee requested, to be used by DOE to select projects for loan guarantees.

Public Comments:

Several commenters stated that DOE should use a “rolling” or “open” application process, as opposed to only accepting Applications for a limited time in response to a particular solicitation. Commenters from the nuclear industry supported this recommendation by pointing to difficulties that may be faced by nuclear project sponsors with a project development timetable that does not match a DOE solicitation. These commenters also noted that DOE is not in a position to assess with precision the market forces that will govern the number of new projects potentially eligible for loan guarantees, or when those projects will need loan guarantees, and contended that other major federal loan guarantee programs – including TIFIA, Ex-Im Bank and OPIC – operate with an open or ongoing (rolling) application process. (NEI at pp. 28-29; Nuclear Utilities at p. 17)

The Nuclear Utilities ask that DOE adopt a flexible “open” application process for large multi-year projects involving more than \$2 billion and/or 1,000 MW of generating capacity. (Nuclear Utilities at p. 17) Citi stated that “[b]y accepting applications only in response to a particular solicitation, the DOE loan guarantee process would be unduly prejudicial to projects that happened to have matured to produce the required pre-application materials in the narrow timeframe of a solicitation.” Citi requested clarification that DOE will accept and review applications for eligible projects at any time when sponsors believe that the markets are ready for their investment. This allegedly would not preclude DOE from opening or closing the program for specific technologies at various times. (Citi at 5). Goldman Sachs, Bechtel and USEC likewise recommended an open application process but also supported a simplified three-step

process (application, followed by a conditional commitment, followed by negotiation and execution of a loan guarantee agreement). (Goldman Sachs at 8, Bechtel at 7, and USEC at 6) (Bechtel at 6-7). Bechtel indicated that this three-step process is used by other federal agencies. (Bechtel at 7)

Beacon further recommended that language in proposed § 609.4 stating that the Pre-Application must meet all requirements in the solicitation and in the final rule should be modified by changing “must” to “should” or “is expected to.” This change would prevent pre-applications from automatic disqualification if they are missing one item, and would make § 609.4 consistent with § 609.5. (Beacon at 3)

DOE Response:

While DOE agrees that an “open” or “rolling” process for Title XVII loan guarantee program applications would give applicants greater flexibility in deciding when, or if, to submit an application to DOE, adopting such a structure at this time would interfere with the Department’s ability to select which of the technologies that Title XVII makes statutorily eligible for loan guarantees should be the focus of any such authority made available by Congress. If DOE were to adopt the “window is always open” and “first come first served” approach to Title XVII, as some commenters appear to advocate, then it is possible that all loan guarantee authority provided by Congress at any particular time could be absorbed by only one or a few very large projects, to the exclusion of smaller projects. This could have the result of the program focusing heavily on only certain eligible technologies merely through operation of the rule itself. Moreover, there is no certainty that the projects first through the application door would be in the areas that either the Department or Congress wished to promote at the particular time. DOE

should be able to tailor loan guarantee availability to particular technologies and particular projects that are the most promising and that in the Department's judgment will most benefit the Nation. Finally, adopting the open application approach could eliminate the Department's ability to have projects compete against one another for the available loan guarantee authority. Especially in the situation where available authority is likely to be insufficient to satisfy all loan guarantee requests, DOE believes it is desirable for there to be competition among projects for the available loan guarantees, rather than for the authority to be used up on a first come first served basis regardless of the relative merits of potentially eligible projects.

At some future time, after substantial experience has been gained in the administration of the Title XVII program, it may be appropriate and possible for the Department to reconsider this position. In the meantime, however, DOE believes it is appropriate to implement the program by requiring the Department to issue a solicitation for projects, tailored broadly or narrowly as the Department sees fit at the time and in light of programmatic objectives.

The Department thus has decided to adopt a solicitation-based approach to the implementation of Title XVII, as was proposed in the NOPR. The rule provides that each solicitation must set forth relative weighting criteria specifying the factors that will be used to evaluate applications and the relative weighting assigned to each criterion. DOE has considered, but has decided not to require by rule, competitive procedures or requirements to be employed when the Department evaluates applications for loan guarantees. As a practical matter, loan guarantee applications submitted in response to solicitations will be competing against each other for available loan guarantee authority.

This enables and indeed requires competition to take place by requiring that each solicitation set forth relative weighting criteria by which applications for loan guarantees will be judged. In that manner, applications will not necessarily be "competed" one against the other, but the evaluation process nonetheless will result in the applications being ranked in such a manner that the applications that best fulfill statutory and solicitation criteria from the Department's perspective will receive higher scores.

DOE is mindful that certain projects, *e.g.* nuclear power plants, require long lead times prior to the submission of a loan guarantee application, but believes that solicitations can be devised and tailored to particular technologies that accommodate such long lead time requirements consistent with the overarching legislative purpose of promoting technologies that further Title XVII policy goals. Additionally, DOE does not believe it is appropriate to make the language change requested by Beacon to section 609.4 of the final regulations. The listed items to be included with Pre-Application submissions are intended to be mandatory. However, the Department clarifies that a Pre-Application will not necessarily be rejected simply because one or even a few items are not in final form when they are submitted with the initial Pre-Application submission. The Department will exercise reasonable discretion in giving Applicants an opportunity to complete their Pre-Application submissions in a timely manner within the open period provided by a solicitation. DOE, of course, may reject any Pre-Application or Application that it considers incomplete.

E. Payment of the Credit Subsidy Cost

Section 1702(b) of the Act states that: "No guarantee shall be made unless (1) an appropriation for the cost has been made; or (2) the Secretary has received from the

borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.” (42 U.S.C. 16512) Section 20320(a) of P. L. 110-5, however, only authorized DOE to accept Credit Subsidy Cost payments from Borrowers to pay the full Credit Subsidy Costs of loan guarantees with respect to the \$4 billion in loan guarantee authority authorized by the CR. Moreover, DOE’s intent continues to be to implement the Title XVII program only through the self-pay authority of section 1702(b)(2). As stated in the NOPR, DOE interprets section 1702(b) as authorizing either an appropriation or payment of the credit subsidy cost in full by the Borrower, but Title XVII does not allow and DOE will not allow partial payment of the Credit Subsidy Cost by the Borrower with the remainder covered by a Congressional appropriation.

Public Comments:

Several commenters recommended a transparent formula for the calculation of each project’s Credit Subsidy Cost. They contend that project sponsors need a reasonably accurate estimate of the subsidy cost early in the development process in order to support multi-billion dollar investment decisions. Otherwise, project sponsors will be forced to engage in lengthy negotiations before they know the amount of the Credit Subsidy Costs they will be required to pay, and before they can properly assess their interest in the Title XVII program. (e.g., Dominion at 9; Southern at 2) For regulated electric companies in particular, negotiation with state regulatory bodies concerning recovery of project costs arguably will be impossible without some reasonable estimate of the Credit Subsidy Cost.

NEI suggested that DOE develop written guidance providing the specific considerations that will enter into the determination of the Credit Subsidy Cost for a

project and modify the proposed rule to: (1) provide for early disclosure to an applicant of how DOE expects to apply those considerations in determining the Credit Subsidy Cost for the applicant's project; and (2) afford the applicant an opportunity to respond in writing for the purpose of allowing DOE to determine whether additional considerations and analysis warrant a re-estimate. (NEI at 17-18).

Other commenters seek clarification that when determining subsidy costs, DOE and OMB will evaluate the entire risk profile of the project, including but not limited to creditworthiness of the project and, to the extent of the equity contribution, the project sponsor; the Borrower's exposure to market and commodity risks; and the Borrower's exposure to vendor cost increases or construction delays. According to these commenters, the Department should consider that the more creditworthy the project is, the lower the subsidy cost should be. They ask that the final regulations recognize that greater equity investment, liquidity, and management experience reduce default risk and, therefore, should result in lower subsidy cost. (NEI at 17-18; and Southern at 2)

JP Morgan maintained that the magnitude of the subsidy cost could have a significant impact on a borrower's interest in a loan and a lender's willingness to provide the financing. Given the uncertainty of the Credit Subsidy Cost calculation, JP Morgan recommended that DOE provide borrowers with an option to withdraw their applications upon DOE's notification to the borrower of the subsidy cost to be charged. Similarly, JP Morgan asserted that lenders should be permitted to withdraw any commitments upon notification of the subsidy cost, and that DOE's interpretation of § 1702(b) in the NOPR should be reconsidered in order to permit borrowers to pay part of the Credit Subsidy Costs where there has been a congressional appropriation. (JP Morgan at 2)

USEC asserted that the Credit Subsidy Cost should be small in order to ensure repayment (commensurate with other federal loan guarantees). Apparently in order to keep the Applicant's share of Credit Subsidy Costs small, USEC recommended that DOE seek appropriations for credit subsidy costs because the overall purpose of the Title XVII program is to foster commercial deployment of new and innovative technologies. (USEC at 5). Beacon also maintained that § 609.9(d)(1) of the proposed rule should be modified to permit partial self-funding/partial appropriation of the Credit Subsidy Cost.

Specifically, Beacon recommended that DOE should change the parenthetical "(but not from a combination)" in § 609.9(d)(1) to "(including a combination)". (Beacon at 6).

Ameren, too, contended that the NOPR should be revised to allow for the possibility that Congress will appropriate money for payment of the Credit Subsidy Cost. Ameren stated that the regulations should not always require applicants to pay the Credit Subsidy Costs for a guaranteed loan, and encouraged DOE to follow the flexible approach used by Ex-Im Bank. (Ameren at 4-5).

DOE Response:

The Department has decided not to alter the proposed regulation dealing with the calculation of Credit Subsidy Costs. With respect to the issue of transparency, the Department certainly understands the need for and importance of a mechanism to allow potential participants in the Title XVII program to calculate an approximate Credit Subsidy Cost for the loan guarantee they are seeking from DOE. The Department currently is working to develop a methodology that can be used to calculate the Credit Subsidy Cost for individual projects under this program. With respect to the comment indicating that the credit subsidy cost should be small, DOE must calculate the Credit

Subsidy Cost in accordance with the Federal Credit Reform Act. DOE will calculate the Credit Subsidy Cost of any loan guarantee on a case-by-case basis in accordance with FCRA and OMB Circular A-11. Per the definition in FCRA, the credit subsidy cost reflects the net present value of estimated payments from the government (e.g. default claim payments) and to the government (e.g., recoveries), discounted to the point of disbursement. For any project, the terms and conditions of the guaranteed debt, the risks associated with the project, and any other factor that affects the amount and timing of such cash flows will affect the credit subsidy cost calculation. Factors that mitigate risks will generally lower the credit subsidy cost. We note that the approach used by Ex-Im and recommended by Ameren does not apply here because the fees charged by Ex-Im do not reflect the subsidy cost for the loan guarantee.

The Department and the Office of Management and Budget (OMB) recognize the value to project sponsors and lenders of knowing the earliest reasonable time the appropriate credit subsidy cost for the sponsor's desired loan guarantee. The Department and OMB further recognize that the two agencies must work together to produce any preliminary credit subsidy cost estimate. Accordingly, the Department and OMB are committed to making every effort to agree upon and provide to project sponsors, at the time a Term Sheet is provided, a preliminary credit subsidy cost estimate for the desired loan guarantee, based on information available to the Department and OMB at that time. The final credit subsidy cost determination can only be made at the time of the Loan Guarantee Agreement, and may be different from the preliminary credit subsidy cost estimate, depending on project-specific and other relevant factors including final

structure, the terms and conditions of the debt supported by the Title XVII guarantee, and risk characteristics of the project.

We note that Applicants are free to withdraw their Applications at any time if they find that the Credit Subsidy Cost is more than the Applicant is willing to pay. The right of an Applicant to withdraw its application does not relieve the Applicant of any obligations to DOE at the time of the withdrawal (including, for example, the payment of outstanding or accrued administrative fees).

On the other hand, we do not agree that lenders in all circumstances should similarly be permitted to withdraw their commitments upon notification of the Credit Subsidy Cost, as recommended by some commenters. The rights of lenders to withdraw will turn on the nature of the commitment that the lender has given to the Borrower.

We also reject the recommendation that Applicants should be able to make partial payment of the Credit Subsidy Cost and rely on appropriations for the remainder of the Credit Subsidy Cost for a particular project. As indicated in the NOPR, DOE interprets section 1702(b)(2) of the Act as not permitting partial payment of the Credit Subsidy Cost by the Borrower with the remainder coming from an appropriation. DOE believes the statutory language is clear in that regard, but even if it were determined to be ambiguous, DOE would exercise its policy discretion to interpret the statutory provision in the manner set forth herein. Consequently, DOE adheres to the interpretation of this provision set forth in the NOPR, and retains in the final rule the all or none principle with respect to the payment of Credit Subsidy Costs, unless otherwise provided by statute. The Department notes that the final rule does not prohibit the use of appropriations to pay

for those Credit Subsidy Costs – indeed, Title XVII explicitly allows that. But DOE has no current intention to seek appropriations to pay Credit Subsidy Costs for any projects.

F. Assessment of Fees

Section 1702(h) of the Act requires DOE to “charge and collect fees for guarantees” to cover the administrative cost of issuing a Loan Guarantee. Proposed sections 609.6, 609.8, and 609.10 provided that DOE would collect fees for administrative expenses covering all phases of an Eligible Project. As defined in proposed section 609.2, these fees consist of the administrative expenses that DOE incurs during: (1) the evaluation of both the Pre-Application, if a Pre-Application is requested in a solicitation, and the Application for a loan guarantee; (2) the offering of a Conditional Commitment, the execution of the Term Sheet, and the negotiation and closing of a Loan Guarantee Agreement; and (3) the servicing and monitoring of the Loan Guarantee Agreement, including during construction, start-up, commissioning, shakedown, and the operational phases of an Eligible Project.

Public Comments:

Several commenters stated that administrative fees should be known, quantified, and/or fixed at the time an application is submitted to DOE. Beacon, for example, recommended that all fees should be quantified in advance as a percentage of the loan amount or in a formula based on the loan amount, and said DOE should make a conforming change to the proposed rule at section 609.10(d)(4). Beacon commented that knowing the basis of fee amounts arguably would facilitate the calculation of project costs and alleviate the burden of cost uncertainties on small businesses and development stage companies. (Beacon at 1). Ameren sought clarification as to how DOE anticipates

recovering the costs associated with evaluation of Pre-Applications that progress no farther in the process. Ameren asserted that the costs should be borne by DOE rather than from funds made available for the issuance of loan guarantees. Ameren stated that “[i]t would be inappropriate to reduce funds specifically appropriated for loan guarantees to cover Department administrative expenses that the Department has chosen to bear.” (Ameren at 5-6).

DOE Response:

DOE recognizes the concern of several commenters on the advantages of a well-understood formula for calculating administrative fees. The Department may at some future time take action with respect to administrative fees, but is not doing so now. The fees are intended to recover only DOE’s administrative costs in managing the Loan Guarantee Program. A fee schedule will be published by DOE in the near future.

We reject Ameren’s recommendation that the costs of administering the Loan Guarantee Program should be borne by DOE. Section 1702(h) of the Act calls for DOE to “charge and collect fees . . . sufficient to cover applicable administrative expenses” of the Title XVII program. Therefore, while DOE does have discretion to determine which administrative expenses should properly be deemed “applicable” to this program and/or to particular applications and thus recovered from program applicants or participants, the Department certainly is not free to determine that it will recover none of its administrative costs from applicants or participants and, instead, fund the costs of the program through appropriations from Congress.

G. Eligible Lenders and Servicing Requirements

The NOPR stated that participating Eligible Lenders or other servicers must meet certain eligibility, monitoring, and performance requirements. These requirements, which were set forth in sections 609.2 and 609.11 of the proposed regulations, were intended to ensure that the Eligible Lender or other servicer had the financial wherewithal and appropriate experience and expertise to meet its fiduciary obligations in connection with the debt guaranteed by DOE. Section 609.10(g) of the proposed regulations also provided that a lender must provide written notification to DOE prior to the assignment or transfer of any portion of a Guaranteed Obligation.

Public Comments:

TXU stated that “[a]ny lender providing debt capital to a project on a limited recourse basis would be performing an exhaustive due-diligence process, using appropriate expertise to analyze the risks.” TXU asserted, therefore that the duty of care specified in the regulations is unnecessarily duplicative of the process that the lender will use irrespective of the Department’s involvement as guarantor. Additionally, TXU contended that any specific duties such as notice requirements should be assigned to an Administrative Agent or Lending Agent and that debt held by other lenders should be freely marketable without administrative burden on all lenders. (TXU at 8). WMPI Pty., LLC (WMPI) recommended that DOE revise the requirements proposed for lenders to take into account that eligible projects are more likely to be financed in capital markets by a group of bondholders through a public offering than by a single lender. Specifically, WMPI pointed out that a commitment letter would not be issued where there is a bond issuance and recommended that DOE recognize this fact in the final rule. WMPI also asserted that the final regulations should be revised to take account of the fact that

interest charges and repayment schedules are not known in advance of a bond sale and, therefore, regulations calling for copies of loan documents containing all of the terms and conditions of the loan, including interest charges and principal repayment schedules, will be inapplicable if the financing is done through a bond public offering. (WMPI at 11-13).

Beacon recommended that the language “including a qualified retirement plan, or governmental plan” be deleted from the definition of Eligible Lender in proposed section 609.11(a)(1) because small businesses and development stage companies may need to approach financial institutions that may not have the specified plans. Beacon also recommended the entirety of proposed section 609.11(a)(6) be deleted. That language would require eligible lenders to have experience as the lead lender or underwriter by presenting evidence of its participation in other energy-related projects. Beacon maintains that this requirement is unduly restrictive because not many lenders have such experience and it is also generally irrelevant since the loan guarantee program is limited to new or significantly improved technologies. (Beacon at 7).

Goldman Sachs asserted that, except for certain critical requirements (e.g., eligible lenders are disqualified if they have been disbarred from participation in a Federal government contract), the provisions in the NOPR regarding the eligible lender should apply only to the lead lender. This is necessary, Goldman Sachs argued, because only a small number of lenders will be able to meet the standards set forth in the NOPR, *e.g.*, will have the experience originating and servicing loans similar in size and scope to the projects that will be the subject of loan guarantee applications; or be able to demonstrate experience as the lead lender in other energy-related projects. Particularly as

regards the expected financing needs of nuclear power projects, Goldman Sachs maintained that the potential lending pool should be kept as large as possible. (Goldman Sachs at 8).

DOE Response:

The Department endorses the idea of maximizing the pool of Eligible Lenders and of allowing the use of loan servicers that may not be Eligible Lenders but that otherwise meet all applicable standards.

In addition, in response to comments that DOE finds persuasive, the Department has eliminated proposed section 609.11(a)(1) from the final rule. Furthermore, while DOE rejects Beacon’s suggestion that the Department delete the entirety of section 609.11(a)(6) of the proposed regulations, we did delete the words “energy-related.” While it is arguably true that the pool of servicers might be increased even further if section 609.11(a)(6) were completely eliminated, deletion of this provision altogether would not be consistent with DOE’s desire to establish a program where there was a reasonable assurance of repayment in connection with guaranteed loans. We note, however, that in the final rule, section 609.11(a) and (b) do not apply to a loan servicer unless the servicer is also the Eligible Lender.

In response to WMPI’s comments, DOE believes that today’s final rule is flexible enough to support bond financing. Among other things, the definition of “Holder” is sufficiently broad to cover the issuers of that type of debt.

H. Federal Credit Reform Act of 1990 (FCRA)

FCRA provides that for any federal credit program, new direct loans and loan guarantees may not be made unless authority has been provided in advance in

appropriations act(s). See 2 U.S.C. 661c(b). Title XVII authorizes the issuance of loan guarantees where the credit subsidy cost, calculated in accordance with FCRA, is paid either through appropriations or by the borrower receiving the loan guarantee from the Department. On February 15, 2007, P.L. 110-5 was enacted. That statute provides DOE with the necessary authority, consistent with FCRA and section 1702, to guarantee in the aggregate up to \$4 billion in loans for Title XVII projects. The authority to issue guarantees, however, was limited to Borrowers who pay the applicable Credit Subsidy Cost. No general funds are available to pay Credit Subsidy Costs.

Public Comments:

A number of commenters questioned DOE's view that authority in an appropriations act is needed for the issuance of Title XVII loan guarantees. These commenters pointed to a statement by the Government Accountability Office (GAO) that Title XVII itself provides adequate authority for DOE to issue loan guarantees without the need for any additional authority in an appropriations act, provided DOE employs the Title XVII "self-pay" authority. Specifically, by letter dated April 20, 2007, GAO indicated its belief that because Title XVII allows for Credit Subsidy Costs to be covered by appropriations *or* by a payment from the borrower, where the recipient of a loan guarantee fully funds the Credit Subsidy Cost for its loan guarantee, no appropriations act authority should be required. Some commenters added that if DOE plans to adhere to the view that appropriations act authority is required for all Title XVII loan guarantees, it must seek and obtain an amendment to Title XVII or sufficient appropriations act authority to allow the Title XVII loan guarantee program to succeed.

DOE Response:

The Department does not interpret section 1702(b) of the Act as providing either budget authority or other authority to make any individual loan guarantee, as is required by FCRA. Instead, DOE reads the Act and FCRA in harmony, which means that while Title XVII authorizes DOE to carry out the loan guarantee program, the Department may not issue any loan guarantees until it has received budget authority or is otherwise provided authority to make guarantees in an appropriations act. While the Act authorizes payment from a borrower as an alternative source of funding, any such alternative source of funding does not relieve DOE from the necessity of obtaining authority in an appropriations act for the issuance of any loan guarantees, even in cases where the Credit Subsidy Cost will be paid by the borrower or project sponsor and no appropriations are used to pay such costs. Congress acted consistent with this interpretation of Title XVII and section 504 of FCRA when, in section 20320 of P. L. 110-5 it authorized a \$4 billion in loan guarantee limitation and required the use of the self-pay authority of the Title XVII for the loan guarantee authority provided by P.L. 110-5.

In the absence of the Title XVII authorization for DOE to receive borrower-paid funds to pay for the Credit Subsidy Cost of a particular loan guarantee, DOE would not have the ability to defray the Credit Subsidy Costs for loan guarantees in that manner. Title XVII clearly authorizes those costs to be covered either with appropriated funds or with borrower paid funds. Furthermore, Title XVII and FCRA, read together, require DOE to obtain authority in an appropriations act to issue loan guarantees, even when employing the Title XVII self-pay authority.

Section 20320 of P.L. 110-5 does three things: (1) it provides a loan guarantee volume limitation of \$4 billion; (2) it requires that borrower self-pay the Credit Subsidy

Cost; and (3) it prohibits the use of general fund appropriations for such costs. In enacting P.L. 110-5, Congress acted consistently with the Administration's view that authority in appropriations acts is required in advance before a loan guarantee can be issued. Therefore, for the \$4 billion authorized by P.L. 110-5, DOE will implement the program with self-pay authority. Furthermore, DOE intends to continue to implement the Title XVII program through the self-pay authority provided by the Act and has no current intention to seek appropriations to pay Credit Subsidy Costs for any project.

I. Default and Audit Provisions

Title XVII, sections 1702(g) and 1702(i), require DOE to promulgate regulations to address default and audit requirements (42 U.S.C. 16512(g), (i)). Sections 609.15 and 609.17 of DOE's regulations, respectively, address these requirements. These provisions will apply to all loan guarantees issued under the Title XVII program.

Public Comments:

USEC expressed concern that the Department's assertion of audit authority could be interpreted as requiring application of the Federal Acquisition Regulations (FAR). (USEC at 6) Other parties were concerned that after-the-fact audits could reduce the amount of project costs and the extent of the guarantee coverage. According to Bechtel, in particular, such a requirement would make the guarantee a conditional commitment. (Bechtel at 5-6) These parties pointed out that in project financing, an independent engineer is customarily used to review and certify costs prior to each loan disbursement and they recommended this approach be adopted in DOE's regulations. In Bechtel's view, once a disbursement is made, the guarantee should be unconditional and not subject to reduction in a post-disbursement audit. (Bechtel at 5-6).

Goldman Sachs recommended that the final rule clearly provide for the guarantee to be available in the case of defaults other than non-payment of principal and interest without the need for a DOE determination of material effect. Goldman Sachs maintained that as proposed, the rule would prevent lenders from making a demand on the guarantee in the case of defaults other than non-payment of principal and interest unless DOE agrees, and would potentially decrease the pool of lenders willing to participate. Goldman Sachs also recommended the adoption of a “well-defined, market-based, and court-tested” mechanism for handling default and suggested that DOE look to the monoline insurance market which provides credit enhancement to capital markets transactions. (Goldman Sachs at 4-5)

DOE Response:

DOE clarifies that the final rule and the Title XVII loan guarantee program are not subject to the FAR. The Department also clarifies that the audit provisions do not render the loan guarantees conditional, but that the need to retain audit authority is necessary to prevent fraud and abuse and should in no way be construed as limiting the enforceability of the Title XVII Loan Guarantee.

DOE does not accept Goldman Sachs’ recommendation that DOE give up its right to approve claims on the guarantees in the event of defaults for circumstances other than non-payment of principal and interest. Inasmuch as DOE likely will be the largest risk taker in any project receiving a Title XVII guarantee, the Department is not being unreasonable in insisting that it have a say about what event can accelerate payments under the Loan Guarantee Agreement.

However, the Department has revised section 609.15(e), which requires lenders to provide supporting documentation to justify a payment demand, to specify that requirements will be provided in the Loan Guarantee Agreement. Also, DOE clarifies that proposed section 609.15(b) is not intended and should not be read to preclude demands for failure to pay principal and interest where there has been a default other than a payment default. A non-payment default can become a payment default if such default is not cured within the time specified in the Loan Guarantee Agreement and the debt is accelerated and thus causes the entire amount of the loan to become immediately due and payable. DOE will retain the audit provision in section 609.17(b) which permits DOE, in the course of conducting an audit, to exclude from or reduce project costs that are determined to be unnecessary or excessive. As indicated above, such an audit provision is necessary in order to protect the Federal government against the possibility of fraud or abuse.

J. Tax Exempt Debt

Section 103(a) of the Internal Revenue Code (IRC), 26 U.S.C. 103(a), provides that “gross income” does not include interest on any state or local bond, with certain exceptions. Section 149(b) of the IRC, 26 U.S.C. 149(b) provides that the section 103(a) exclusion from gross income “shall not apply to a state or local bond if such bond is federally guaranteed.” Section 149(b) in effect converts tax exempt debt to taxable debt when such debt is guaranteed by the Federal government. Accordingly, DOE proposed in section 609.10 of the NOPR to prohibit the Department from directly or indirectly guaranteeing tax exempt obligations.

Public Comments:

The Nuclear Utilities stated that section 609.10's prohibition against issuing any loan guarantees that finance directly or indirectly any tax exempt debt is unnecessarily broad, and appears to establish new policy that negates provisions of current law on tax exempt financing. The Nuclear Utilities focused on several exceptions in 26 U.S.C. § 149(b)(3)(A), which permit loan guarantees to apply to tax exempt debt obligations under certain conditions, and request that the final rule provide that loan guarantees may be issued for debt obligations if they qualify under such a statutory exception in existence at the time of loan guarantee agreement is executed. Specifically, they request that the prohibition in section 609.10(d)(7) of the NOPR should be amended by adding the proviso, "unless such debt obligations fall within one of the exceptions enumerated in 26 U.S.C. § 149(b)(3)(A), or other similar law." (Nuclear Utilities at 15).

Bechtel recommended the deletion of the proposed requirement that prior to the execution of the loan, DOE must ensure that the guarantee does not finance tax exempt debt because it might exclude many municipal and cooperative electric utility companies that rely heavily on tax exempt financing. (Bechtel at 6). CPS sought elimination of the prohibition on grounds that it is duplicative of IRC section 149(b). (CPS at 3)

DOE Response:

The prohibition on municipalities issuing tax-exempt obligations that are also guaranteed by the Federal government is set forth in Federal law, and DOE cannot change the statutory prohibition, regardless of whether or not a similar prohibition is expressed in Title XVII regulations. DOE believes, however, that in the interests of clarity and completeness, the rule should contain such a prohibition. Nonetheless, we are persuaded that the prohibition in the final rule should be expressly coextensive with the statutory prohibition such that any statutory exceptions in effect at the time that a guarantee is issued will also be deemed exceptions from the regulation, because it is not DOE's intent to prohibit by rule, except to the extent prohibited by statute, loan guarantees from being issued for projects employing tax exempt debt. We have modified section 609.10(d)(7) of the final rule accordingly.

K. Full Faith and Credit

Section 609.14 of the proposed regulations provided that the full faith and credit of the United States would be pledged to the payment of all Guaranteed Obligations. It further provided that the guarantee shall be conclusive evidence that it has been properly obtained, that the underlying loan qualified for the guarantee, and that but for fraud or material misrepresentation by the Holder, is presumed to be valid, legal, and enforceable. DOE stated that it maintains a strong interest in ensuring that the debt incurred in order to finance innovative projects can be financed and sold in secondary markets.

Public Comments:

The commenters addressing this issue stressed the need to ensure that the guarantees issued by the Department are completely unconditional and obtain a "AAA"

credit rating. The Investment Bankers focused on several provisions that appear to weaken the unconditional nature of the guarantee. For example, the NOPR sought to impose on Eligible Lenders a duty of care and other duties that are arguably more onerous than is required in commercial markets and in other Federal loan guarantee programs. According to the Investment Bankers, these provisions make the guarantee conditional and put lenders at risk disproportionate to any potential returns, especially in the case of collateral agents or other agents who receive minimal fees for such functions. The Investment Bankers contend that these provisions will further reduce interest in the lender community in this program and, therefore, the availability of financing. (Investment Bankers at 2). Citi, in addressing the need for a “AAA” credit rating, argued that the exception for fraud or material misrepresentation by the holder of the guarantee, as proposed in the NOPR, is not necessary. (Citi at 4).

DOE Response:

Subject only to fraud or material misrepresentation by the Holder, the guarantee is absolute. For the reasons discussed elsewhere in this preamble in connection with the Department’s authority to conduct audits, we reject the argument of Citi and the Investment Bankers that the right to audit for fraud or abuse is unnecessary or would compromise the unconditional nature of Title XVII loan guarantees. The right to audit is vital to the Department’s effort to protect against fraud or abuse and to protect the government and the taxpayer; in any event, Title XVII requires the Department to have regulations addressing audit requirements. DOE also does not agree that the duty of care required of Eligible Lenders is too strict. These standards and the duty of care required of Eligible Lenders, as proposed in the NOPR, do not compromise the unconditional

nature of the guarantees but are intended to support the government's need to assure a reasonable prospect of repayment. So, these requirements should not in any sense restrict or reduce the viability of the Title XVII program.

L. Responses to August 2006 Solicitation

In the NOPR, DOE proposed that in order to ensure that the Department complies with P.L. 110-5 but does not prejudice Pre-Applicants that responded to the First Solicitation, the Title XVII regulations should specify that they do not apply to the Pre-Applications, Applications, Conditional Commitments, and Loan Guarantee Agreements issued or entered into pursuant to the First Solicitation. The only exceptions would be with respect to the default, recordkeeping, and audit requirements in proposed sections 609.15 and 609.17, which Title XVII requires be established by rule. The NOPR also proposed to permit DOE and an Applicant to agree in a Loan Guarantee Agreement entered into pursuant to the First Solicitation that additional provisions of DOE's regulations would apply to the particular project.

Public Comments:

Synergistic Dynamics, Inc. (Synergistic) submits that DOE's proposed waiver of regulatory requirements for the Pre-Applications received in response to the First Solicitation will prejudice subsequent applicants who fully comply with the final regulations. The only other comment DOE received on this aspect of the NOPR was a letter submitted by two members of Congress, which asserted that DOE's proposal was not consistent with Congress's intent in P.L. 110-5, which required that DOE promulgate final regulations before issuing any loan guarantees under the Title XVII program.

(Synergistic at 3)

DOE Response:

The final rule generally adopts the approach set forth in the NOPR, but specifies additional provisions of the regulations that will be applicable to all pre-applications, applications, and loan guarantees, including those under the First Solicitation. The Department still believes it is important not to prejudice Pre-Applicants who responded to the First Solicitation. For example, the final rule establishes requirements for Title XVII solicitations that are not consistent with the content of the August 2006 First Solicitation issued by DOE, and if all provisions of the final rule were made to apply to the First Solicitation and the submissions in response to it, it is difficult to see how DOE could proceed other than to reject all of the Pre-Applications that were submitted and start the program over from scratch. The Department and the Pre-Applicants have spent too much time responding to the First Solicitation to throw that work away and start over.

At the same time, many portions of the final rule can be fairly applied to those entities that responded to the First Solicitation, and the process of considering those responses is at a stage where many of the final rule's requirements can and should be made to apply to them. In fact, the Department believes that it will benefit both Pre-Applicants and the Department to make additional provisions of this rule applicable to them. Because, as DOE noted in the NOPR, section 20320 of P.L. 110-5 does not state whether or to what extent the final rules that P.L. 110-5 requires to be issued must apply to any matters in connection with the First Solicitation, DOE therefore must make a policy judgment about the extent to which this final rule should be so applicable.

In section 609.1 of the final rule, DOE specifies which sections of the regulations are not applicable to Pre-Applicants and projects being considered in response to the First Solicitation. Except as specified in that section, these regulations apply to all projects and loan guarantees pursuant to Title XVII, including those pursuant to the First Solicitation.

M. Other Issues Raised in the Public Comments

1. Non-Recourse Financing.

The NOPR proposed to require the borrower to pledge all project assets and other collateral to obtain a loan guarantee. (609.10(d)(10)). Some commenters sought clarification that in the event of default, the loan guarantee is non-recourse, *i.e.*, liquidation or sale of assets after default is limited to project assets pledged as collateral. The commenters noted that a sponsor may, at its discretion, offer other collateral to reduce the cost of the subsidy and that this is the substance of the collateral pool that lenders would and will require in a limited-recourse financing. However, one commenter

observed that in such a collateral pool, the government would be in a second lien position until it paid, in part or in whole, the project loans – at which time the government would subrogate to a first lien position. (TXU at 6).

Pursuant to the final rule and Title XVII itself, loan guarantees will be secured by all project assets, including, contracts, agreements, and other pledged collateral. Other than pledged project assets and other pledged collateral, however, the loan guarantee is non-recourse as to all persons and entities. The issue of lien position is discussed elsewhere in this preamble.

2. Timeline for Processing Application.

P&W recommended that in order for an Applicant to effectively plan its project development life cycle, DOE should clearly define a timeline for application processing and loan awards. P&W said there are sensitivities around time to market that might preclude engagement with the loan guarantee program if the timeline moves too slowly. (P&W at 3). Dominion asked DOE to consider offering priority processing to applicants that wish to enter into loan guarantees of shorter terms than the statutorily allowed maximum, because a reduced loan guarantee term reduces risk to the government, and contended that priority processing of such lower risk projects would further the President's Advanced Energy Initiative. (Dominion at 4).

The Department believes that given the breadth, diversity, and innovative nature of the technologies that are potentially eligible for Title XVII loan guarantees and for which loan guarantees will be sought, it is not feasible at this point to establish by rule firm timelines for the processing of applications. This issue may be revisited at some point in the future, after DOE and participants have gained more experience with the

program. The Department may, in the context of a particular solicitation, establish specific timelines for various phases of the application and consideration process for that solicitation. DOE also is not persuaded that it should attempt, in these regulations, to provide a sort of higher priority in the processing or granting of loan guarantees for potentially lower risk or reduced loan term applications. Such a rule might be inconsistent with particular Departmental objectives if DOE wished to focus a particular solicitation on high-risk technologies. Moreover, it likely would be difficult, early in the process of reviewing an application, to determine with any certainty which applications presented lower risk than others.

As for the issue of shorter-term loans – for example, loans that only have a five-year term, or on which the DOE guarantee expires after five years, the term may or may not weigh into the consideration of the application. DOE does not believe it is appropriate to provide by rule for priority processing of requests for shorter-term guarantees. In individual solicitations, the Department may set forth priorities for processing applications, consistent with the final rule.

3. Conditional Commitment

Section 609.8(c) of the NOPR provided in part that “[w]hen and if all of the terms and conditions specified in the Conditional Commitment have been met, DOE and the Applicant may enter into a Loan Guarantee Agreement, but neither party is legally obligated to do so.” (emphasis added) The Nuclear Utilities stated that DOE should allow flexibility in the type of “commitment” provided by the Department in advance of the planned financial close of guaranteed debt. (Nuclear Utilities at 18). On the other hand, TXU stated that once the Sponsor submits the Application package, DOE should

issue a Conditional Commitment and, as long as the sponsor meets all of the conditions set forth in the Commitment, the sponsor should be assured that the federal loan guarantee will be forthcoming. According to TXU, the need for assurance that a guarantee will be issued where all conditions are met is essential because the costs of securing a guarantee, providing all the necessary documents, licenses and permits, etc., could cost in the hundreds of millions of dollars, especially in the case of nuclear plants or other capital intensive projects. TXU maintained that following the preliminary application stage, a sponsor should not have to be concerned about making these expenditures and not receiving a federal guarantee unless the sponsor fails to fulfill all the conditions precedent to the loan program. (TXU at 8-9).

DOE agrees with the concerns expressed, and therefore has revised sections 609.2 and 609.8 to indicate that a Conditional Commitment is an agreement to pursue the execution of a Loan Guarantee Agreement. The Secretary may terminate a Conditional Commitment for any reason at any time prior to execution of the Loan Guarantee Agreement. To ensure that no Conditional Commitment binds DOE to enter into a Loan Guarantee Agreement without both adequate legal authority to do so and payment into the Treasury of required fees and costs, the final rule provides that DOE's obligations under each Conditional Commitment are conditional upon Congress having provided in advance of the execution of the loan guarantee sufficient authority under FCRA and Title XVII for DOE to execute the Loan Guarantee Agreement, and either an appropriation has been made or a borrower has paid into the Treasury sufficient funds to cover the full Credit Subsidy Cost for the loan guarantee that is the subject of the Conditional Commitment. These conditions are made applicable by rule to each Conditional

Commitment, and are applicable whether or not they are specifically stated in the text of a Conditional Commitment.

4. Restrictions on the Transferability of Guaranteed Obligations

Goldman Sachs recommended that the final rule not include restrictions on transferability of guaranteed loans, and that DOE clarify that the provisions regarding the eligible lender apply only to the lead lender. Goldman Sachs said that section 609.10(g)(1) of the proposed rule, which would have required the eligible lender to provide written notification of any assignment, transfer, pledge, or use of a guaranteed obligation, renders such actions subject to DOE consent are not practical because the lead lender will need to assign and/or participate the loans to a large number of institutions very quickly. This flexibility is particularly important, according to Goldman Sachs, given the significant capital needed for construction of a nuclear power facility and the need for lenders in the secondary market for the ability to freely trade their loans. Bank of America Securities, LLC (BOA) also objected to this section. (BOA at 8)

The Department has an interest in ensuring that any Guaranteed Obligation presented to it for payment is valid. Accordingly, revised section 609.10(g) states that DOE will provide in the Loan Guarantee Agreement and related documents, procedures for identifying Holders of the Guaranteed Obligations, including for the purpose of payments pursuant to the guarantee in the event of default.

III. Regulatory Review

A. Executive Order 12866

Today's final rule has been determined to be a significant regulatory action under Executive Order 12866, "Regulatory Planning and Review," 58 FR 51735 (October 4,

1993). Accordingly, this action was subject to review under that Executive Order by the Office of Information and Regulatory Affairs at Office of Management and Budget (OMB).

B. National Environmental Policy Act of 1969

Through the issuance of this rule, DOE is making no decision relative to the approval of a loan guarantee for a particular proposed project. DOE has, therefore, determined that publication of the final rule is covered under the Categorical Exclusion found at paragraph A.6 of Appendix A to Subpart D, 10 CFR Part 1021, which applies to the establishment of procedural rulemakings. Accordingly, neither an environmental assessment nor an environmental impact statement is required at this time. However, appropriate NEPA project review will be conducted prior to execution of a Loan Guarantee Agreement.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process (68 FR 7990). DOE has made its procedures and policies available on the Office of the General Counsel’s Web site:

<http://www.gc.doe.gov>.

DOE is not obliged to prepare a regulatory flexibility analysis for this rulemaking because there is no requirement to publish a general notice of proposed rulemaking for rules related to loans under the Administrative Procedure Act (5 U.S.C. 553).

D. Paperwork Reduction Act

Sections 609.4 and 609.6 of this rule provide that Pre-Applications and Applications for loan guarantees submitted to DOE in response to a solicitation must contain certain information. This information will be used by DOE to determine if a project sponsor who submits a Pre-Application will be invited to submit an Application for a loan guarantee; to determine if a project is eligible for a loan guarantee; and to evaluate Applications under criteria specified in the rule. Section 609.17 provides that borrowers must submit to DOE annual project performance reports and audited financial statements along with other information. DOE will use this information to evaluate the progress of projects for which loan guarantees are issued. DOE submitted this collection of information to OMB for approval pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) and the procedures implementing that Act, 5 CFR 1320.1 et seq. OMB approved this collection of information and assigned it OMB Control No. 1910-5134.

E. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (Act) (2 U.S.C. 1531 et seq.) requires each federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any federal mandate in an agency rule that may result in the expenditure by state, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation) in any one year. The Act

also requires a federal agency to develop an effective process to permit timely input by elected officials of state, tribal, or local governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity to provide timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments.

The term “federal mandate” is defined in the Act to mean a federal intergovernmental mandate or a federal private sector mandate (2 U.S.C. 658(6)). Although the rule will impose certain requirements on non-federal governmental and private sector applicants for loan guarantees, the Act’s definitions of the terms “federal intergovernmental mandate” and “federal private sector mandate” exclude, among other things, any provision in legislation, statute, or regulation that is a condition of federal assistance or a duty arising from participation in a voluntary program (2 U.S.C. 658(5) and (7), respectively). Today’s rule establishes requirements that persons voluntarily seeking loan guarantees for projects that would use certain new and improved energy technologies must satisfy as a condition of a federal loan guarantee. Thus, the rule falls under the exceptions in the definitions of “federal intergovernmental mandate” and “federal private sector mandate” for requirements that are a condition of federal assistance or a duty arising from participation in a voluntary program. The Act does not apply to this rulemaking.

F. Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment

for any proposed rule that may affect family well being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

G. Executive Order 13132

Executive Order 13132, “Federalism,” 64 FR 43255 (August 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and carefully assess the necessity for such actions. DOE has examined this rule and has determined that it would not preempt State law and would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. No further action is required by Executive Order 13132.

H. Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” 61 FR 4729 (February 7, 1996), imposes on Executive agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. With regard to the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the

regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this rule meets the relevant standards of Executive Order 12988.

I. Treasury and General Government Appropriations Act, 2001

The Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB.

OMB's guidelines were published at 67 FR 8452 (February 22, 2002), and DOE's guidelines were published at 67 FR 62446 (October 7, 2002). DOE has reviewed today's final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

J. Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001) requires Federal agencies to prepare and submit to the OMB, a Statement of Energy Effects for

any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use. Today’s regulatory action would not have a significant adverse effect on the supply, distribution, or use of energy and is therefore not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects.

K. Congressional Notification

As required by 5 U.S.C. 801, DOE will submit to Congress a report regarding the issuance of today’s final rule prior to the effective date set forth at the outset of this notice. The report will state that it has been determined that the rule is not a “major rule” as defined by 5 U.S.C. 804(2).

L. Approval by the Office of the Secretary of Energy

The Secretary of Energy has approved the issuance of this final rule.

List of Subjects in 10 CFR Part 609

Administrative practice and procedure, Energy, Loan programs, and Reporting and recordkeeping requirements.

Issued in Washington, DC, on

Steve Isakowitz
Chief Financial Officer

For the reasons stated in the Preamble, chapter II of title 10 of the Code of Federal Regulations is amended by adding a new part 609 as set forth below.

PART 609 – LOAN GUARANTEES FOR PROJECTS THAT EMPLOY INNOVATIVE TECHNOLOGIES

Sec.

- 609.1 Purpose and Scope.
- 609.2 Definitions.
- 609.3 Solicitations.
- 609.4 Submission of Pre-Applications.
- 609.5 Evaluation of Pre-Applications.
- 609.6 Submission of Applications.
- 609.7 Programmatic, Technical and Financial Evaluation of Applications.
- 609.8 Term Sheets and Conditional Commitments.
- 609.9 Closing on the Loan Guarantee Agreement.
- 609.10 Loan Guarantee Agreement.
- 609.11 Lender Eligibility and Servicing Requirements.
- 609.12 Project Costs.
- 609.13 Principal and Interest Assistance Contract.
- 609.14 Full Faith and Credit and Incontestability.
- 609.15 Default, Demand, Payment, and Collateral Liquidation.
- 609.16 Perfection of Liens and Preservation of Collateral.
- 609.17 Audit and Access to Records.
- 609.18 Deviations.

Authority: 42 U.S.C. 7254, 16511-16514.

§ 609.1 Purpose and Scope.

(a) This part sets forth the policies and procedures that DOE uses for receiving, evaluating, and, after consultation with the Department of the Treasury, approving applications for loan guarantees to support Eligible Projects under Title XVII of the Energy Policy Act of 2005.

(b) Except as set forth in paragraph (c) of this section, this part applies to all Pre-Applications, Applications, Conditional Commitments and Loan Guarantee Agreements to support Eligible Projects under Title XVII of the Energy Policy Act of 2005.

(c) (1) Sections 609.3, 609.4 and 609.5 of this part shall not apply to any Pre-Applications, Applications, Conditional Commitments or Loan Guarantee Agreements under the Guidelines issued by DOE on August 8, 2006, which were published in the Federal Register on August 14, 2006 (71 FR 46451) and the solicitation issued on August 8, 2006 under Title XVII of the Energy Policy Act of 2005, provided the Pre-Application is accepted under the Guidelines and an Application is invited pursuant to such Pre-Application no later than December 31, 2007.

(2) Except as provided in paragraph (c)(1) of this section, DOE and any Applicant who submitted an Application under the August 8, 2006 solicitation may agree to make additional provisions of this part applicable to the particular project.

(d) Part 1024 of chapter X of title 10 of the Code of Federal Regulations shall not apply to actions taken under this part.

§ 609.2 Definitions.

Act means Title XVII of the Energy Policy Act of 2005 (42 U.S.C. 16511-16514).

Administrative Cost of Issuing a Loan Guarantee means the total of all administrative expenses that DOE incurs during:

(1) The evaluation of a Pre-Application, if a Pre-Application is requested in a solicitation, and an Application for a loan guarantee;

(2) The offering of a Term Sheet, executing the Conditional Commitment, negotiation, and closing of a Loan Guarantee Agreement; and

(3) The servicing and monitoring of a Loan Guarantee Agreement, including during the construction, startup, commissioning, shakedown, and operational phases of an Eligible Project.

Applicant means any person, firm, corporation, company, partnership, association, society, trust, joint venture, joint stock company, or other business entity or governmental non-Federal entity that has submitted an Application to DOE and has the authority to enter into a Loan Guarantee Agreement with DOE under the Act.

Application means a comprehensive written submission in response to a solicitation or a written invitation from DOE to apply for a loan guarantee pursuant to § 609.6 of this part.

Borrower means any Applicant who enters into a Loan Guarantee Agreement with DOE and issues Guaranteed Obligations.

Commercial Technology means a technology in general use in the commercial marketplace in the United States at the time the Term Sheet is issued by DOE. A technology is in general use if it has been installed in and used in three or more commercial projects in the United States and has been in operation in each such commercial project for a period of five years. The five year period shall be measured, for each project, starting on the in service date of the project or facility employing that particular technology. For purposes of this section, commercial projects include projects that have been the recipient of a loan guarantee from DOE under this part.

Conditional Commitment means a Term Sheet offered by DOE and accepted by the Applicant, with the understanding of the parties that if the Applicant thereafter satisfies all specified and precedent funding obligations and all other contractual, statutory and regulatory requirements, or other requirements, DOE and the Applicant will execute a Loan Guarantee Agreement: Provided that the Secretary may terminate a Conditional Commitment for any reason at any time prior to the execution of the Loan Guarantee Agreement; and Provided further that the Secretary may not delegate this authority to terminate a Conditional Commitment.

Contracting Officer means the Secretary of Energy or a DOE official authorized by the Secretary to enter into, administer and/or terminate DOE Loan Guarantee Agreements and related contracts on behalf of DOE.

Credit Subsidy Cost has the same meaning as “cost of a loan guarantee” in section 502(5)(C) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)(C)), which is the net present value, at the time the Loan Guarantee Agreement is executed, of the following estimated cash flows, discounted to the point of disbursement:

(1) Payments by the Government to cover defaults and delinquencies, interest subsidies, or other payments; less

(2) Payments to the Government including origination and other fees, penalties, and recoveries; including the effects of changes in loan or debt terms resulting from the exercise by the Borrower, Eligible Lender or other Holder of an option included in the Loan Guarantee Agreement.

DOE means the United States Department of Energy.

Eligible Lender means:

(1) Any person or legal entity formed for the purpose of, or engaged in the business of, lending money, including, but not limited to, commercial banks, savings and loan institutions, insurance companies, factoring companies, investment banks, institutional investors, venture capital investment companies, trusts, or other entities designated as trustees or agents acting on behalf of bondholders or other lenders; and

(2) Any person or legal entity that meets the requirements of § 609.11 of this part, as determined by DOE; or

(3) The Federal Financing Bank.

Eligible Project means a project located in the United States that employs a New or Significantly Improved Technology that is not a Commercial Technology, and that meets all applicable requirements of section 1703 of the Act (42 U.S.C. 16513), the applicable solicitation and this part.

Equity means cash contributed by the Borrowers and other principals. Equity does not include proceeds from the non-guaranteed portion of Title XVII loans, proceeds from any other non-guaranteed loans, or the value of any form of government assistance or support.

Federal Financing Bank means an instrumentality of the United States government created by the Federal Financing Bank Act of 1973 (12 U.S.C. 2281 et seq). The Bank is under the general supervision of the Secretary of the Treasury.

Guaranteed Obligation means any loan or other debt obligation of the Borrower for an Eligible Project for which DOE guarantees all or any part of the payment of

principal and interest under a Loan Guarantee Agreement entered into pursuant to the Act.

Holder means any person or legal entity that owns a Guaranteed Obligation or has lawfully succeeded in due course to all or part of the rights, title, and interest in a Guaranteed Obligation, including any nominee or trustee empowered to act for the Holder or Holders.

Loan Agreement means a written agreement between a Borrower and an Eligible Lender or other Holder containing the terms and conditions under which the Eligible Lender or other Holder will make loans to the Borrower to start and complete an Eligible Project.

Loan Guarantee Agreement means a written agreement that, when entered into by DOE and a Borrower, an Eligible Lender or other Holder, pursuant to the Act, establishes the obligation of DOE to guarantee the payment of all or a portion of the principal and interest on specified Guaranteed Obligations of a Borrower to Eligible Lenders or other Holders subject to the terms and conditions specified in the Loan Guarantee Agreement.

New or Significantly Improved Technology means a technology concerned with the production, consumption or transportation of energy and that is not a Commercial Technology, and that has either (i) only recently been developed, discovered or learned; or (ii) involves or constitutes one or more meaningful and important improvements in productivity or value, in comparison to Commercial Technologies in use in the United States.

OMB means the Office of Management and Budget in the Executive Office of the President.

Pre-Application means a written submission in response to a DOE solicitation that broadly describes the project proposal, including the proposed role of a DOE loan guarantee in the project, and the eligibility of the project to receive a loan guarantee under the applicable solicitation, the Act and this part.

Project Costs means those costs, including escalation and contingencies, that are to be expended or accrued by Borrower and are necessary, reasonable, customary and directly related to the design, engineering, financing, construction, startup, commissioning and shakedown of an Eligible Project, as specified in § 609.12 of this part. Project costs do not include costs for the items set forth in § 609.12(c) of this part.

Project Sponsor means any person, firm, corporation, company, partnership, association, society, trust, joint venture, joint stock company or other business entity that assumes substantial responsibility for the development, financing, and structuring of a project eligible for a loan guarantee and, if not the Applicant, owns or controls, by itself and/or through individuals in common or affiliated business entities, a five percent or greater interest in the proposed Eligible Project, or the Applicant.

Secretary means the Secretary of Energy or a duly authorized designee or successor in interest.

Term Sheet means an offering document issued by DOE that specifies the detailed terms and conditions under which DOE may enter into a Conditional Commitment with the Applicant. A Term Sheet imposes no obligation on the Secretary to enter into a Conditional Commitment.

United States means the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa or any territory or possession of the United States of America.

§ 609.3 Solicitations.

(a) DOE may issue solicitations to invite the submission of Pre-Applications or Applications for loan guarantees for Eligible Projects. DOE must issue a solicitation before proceeding with other steps in the loan guarantee process including issuance of a loan guarantee. A Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. A Project Sponsor or Applicant, in other words, may not submit a Pre-Application or Application for multiple projects using the same technology.

(b) Each solicitation must include, at a minimum, the following information:

- (1) The dollar amount of loan guarantee authority potentially being made available by DOE in that solicitation;
- (2) The place and time for response submission;
- (3) The name and address of the DOE representative whom a potential Project Sponsor may contact to receive further information and a copy of the solicitation;
- (4) The form, format, and page limits applicable to the response submission;
- (5) The amount of the application fee (First Fee), if any, that will be required;
- (6) The programmatic, technical, financial and other factors the Secretary will use to evaluate response submissions, including the loan guarantee percentage requested by the Applicant and the relative weightings that DOE will use when evaluating those factors; and

(7) Such other information as DOE may deem appropriate.

§ 609.4 Submission of Pre-Applications.

In response to a solicitation requesting the submission of Pre-Applications, either Project Sponsors or Applicants may submit Pre-Applications to DOE. Pre-Applications must meet all requirements specified in the solicitation and this part. At a minimum, each Pre-Application must contain all of the following:

(a) A cover page signed by an individual with full authority to bind the Project Sponsor or Applicant that attests to the accuracy of the information in the Pre-Application, and that binds the Project Sponsor(s) or Applicant to the commitments made in the Pre-Application. In addition, the information requested in paragraphs (b) and (c) should be submitted in a volume one and the information requested in paragraphs (d) through (h) of this section should be submitted in a volume two, to expedite the DOE review process.

(b) An executive summary briefly encapsulating the key project features and attributes of the proposed project;

(c) A business plan which includes an overview of the proposed project, including:

(1) A description of the Project Sponsor, including all entities involved, and its experience in project investment, development, construction, operation and maintenance;

(2) A description of the new or significantly improved technology to be employed in the project, including:

- (i) A report detailing its successes and failures during the pilot and demonstration phases;
 - (ii) The technology's commercial applications;
 - (iii) The significance of the technology to energy use or emission control;
 - (iv) How and why the technology is "new" or "significantly improved" compared to technology already in general use in the commercial marketplace in the United States;
 - (v) Why the technology to be employed in the project is not in "general use;"
 - (vi) The owners or controllers of the intellectual property incorporated in and utilized by such technologies; and
 - (vii) The manufacturer(s) and licensee(s), if any, authorized to make the technology available in the United States, the potential for replication of commercial use of the technology in the United States, and whether and how the technology is or will be made available in the United States for further commercial use;
- (3) The estimated amount, in reasonable detail, of the total Project Costs;
- (4) The timeframe required for construction and commissioning of the project;
- (5) A description of any primary off-take or other revenue-generating agreements that will provide the primary sources of revenues for the project, including repayment of the debt obligations for which a guarantee is sought.

(6) An overview of how the project complies with the eligibility requirements in section 1703 of the Act (42 U.S.C. 16513);

(7) An outline of the potential environmental impacts of the project and how these impacts will be mitigated;

(8) A description of the anticipated air pollution and/or anthropogenic greenhouse gas reduction benefits and how these benefits will be measured and validated; and

(9) A list of all of the requirements contained in this part and the solicitation and where in the Pre-Application these requirements are addressed;

(d) A financing plan overview describing:

(1) The amount of equity to be invested and the sources of such equity;

(2) The amount of the total debt obligations to be incurred and the funding sources of all such debt if available;

(3) The amount of the Guaranteed Obligation as a percentage of total project debt; and as a percentage of total project cost; and

(4) A financial model detailing the investments in and the cash flows generated and anticipated from the project over the project's expected life-cycle, including a complete explanation of the facts, assumptions, and methodologies in the financial model;

(e) An explanation of what estimated impact the loan guarantee will have on the interest rate, debt term, and overall financial structure of the project;

(f) Where the Federal Financing Bank is not the lender, a copy of a letter from an Eligible Lender or other Holder(s) expressing its commitment to provide, or interest in providing, the required debt financing necessary to construct and fully commission the project;

(g) A copy of the equity commitment letter(s) from each of the Project Sponsors and a description of the sources for such equity; and

(h) A commitment to pay the Application fee (First Fee), if invited to submit an Application.

§ 609.5 Evaluation of Pre-Applications.

(a) Where Pre-Applications are requested in a solicitation, DOE will conduct an initial review of the Pre-Application to determine whether:

(1) The proposal is for an Eligible Project;

(2) The submission contains the information required by § 609.4 of this part;

and

(3) The submission meets all other requirements of the applicable solicitation.

(b) If a Pre-Application fails to meet the requirements of paragraph (a) of this section, DOE may deem it non-responsive and eliminate it from further review.

(c) If DOE deems a Pre-Application responsive, DOE will evaluate:

- (1) the commercial viability of the proposed project;
- (2) the technology to be employed in the project;
- (3) the relevant experience of the principal(s); and
- (4) the financial capability of the Project Sponsor (including personal and/or business credit information of the principal(s)).

(d) After the evaluation described in subsection (c) of this section, DOE will determine if there is sufficient information in the Pre-Application to assess the technical and commercial viability of the proposed project and/or the financial capability of the Project Sponsor and to assess other aspects of the Pre-Application. DOE may ask for additional information from the Project Sponsor during the review process and may request one or more meetings with the Project Sponsor.

(e) After reviewing a Pre-Application and other information acquired under paragraph (c) of this section, DOE may provide a written response to the Project Sponsor or Applicant either inviting the Applicant to submit an Application for a loan guarantee and specifying the amount of the Application filing fee (First Fee) or advising the Project Sponsor that the project proposal will not receive further consideration. Neither the Pre-Application nor any written or other feedback that DOE may provide in response to the Pre-Application eliminates the requirement for an Application.

(f) No response by DOE to, or communication by DOE with, a Project Sponsor, or an Applicant submitting a Pre-Application or subsequent Application shall impose any obligation on DOE to enter into a Loan Guarantee Agreement.

§ 609.6 Submission of Applications.

(a) In response to a solicitation or written invitation to submit an Application, an Applicant submitting an Application must meet all requirements and provide all information specified in the solicitation and/or invitation and this part.

(b) An Application must include, at a minimum, the following information and materials:

(1) A completed Application form signed by an individual with full authority to bind the Applicant and the Project Sponsors;

(2) Payment of the Application filing fee (First Fee) for the Pre-Application, if any, and Application phase;

(3) A detailed description of all material amendments, modifications, and additions made to the information and documentation provided in the Pre-Application, if a Pre-Application was requested in the solicitation, including any changes in the proposed project's financing structure or other terms;

(4) A description of how and to what measurable extent the project avoids, reduces, or sequesters air pollutants and/or anthropogenic emissions of greenhouse gases, including how to measure and verify those benefits;

(5) A description of the nature and scope of the proposed project, including:

(i) Key milestones;

(ii) Location of the project;

(iii) Identification and commercial feasibility of the new or significantly improved technology(ies) to be employed in the project;

- (iv) How the Applicant intends to employ such technology(ies) in the project; and
 - (v) How the Applicant intends to assure, to the extent possible, the further commercial availability of the technology(ies) in the United States;
- (6) A detailed explanation of how the proposed project qualifies as an Eligible Project;
- (7) A detailed estimate of the total Project Costs together with a description of the methodology and assumptions used;
- (8) A detailed description of the engineering and design contractor(s), construction contractor(s), equipment supplier(s), and construction schedules for the project, including major activity and cost milestones as well as the performance guarantees, performance bonds, liquidated damages provisions, and equipment warranties to be provided;
- (9) A detailed description of the operations and maintenance provider(s), the plant operating plan, estimated staffing requirements, parts inventory, major maintenance schedule, estimated annual downtime, and performance guarantees and related liquidated damage provisions, if any;
- (10) A description of the management plan of operations to be employed in carrying out the project, and information concerning the management experience of each officer or key person associated with the project;
- (11) A detailed description of the project decommissioning, deconstruction, and disposal plan, and the anticipated costs associated therewith;

(12) An analysis of the market for any product to be produced by the project, including relevant economics justifying the analysis, and copies of any contractual agreements for the sale of these products or assurance of the revenues to be generated from sale of these products;

(13) A detailed description of the overall financial plan for the proposed project, including all sources and uses of funding, equity and debt, and the liability of parties associated with the project over the term of the Loan Guarantee Agreement;

(14) A copy of all material agreements, whether entered into or proposed, relevant to the investment, design, engineering, financing, construction, startup commissioning, shakedown, operations and maintenance of the project;

(15) A copy of the financial closing checklist for the equity and debt to the extent available;

(16) Applicant's business plan on which the project is based and Applicant's financial model presenting project pro forma statements for the proposed term of the Guaranteed Obligations including income statements, balance sheets, and cash flows. All such information and data must include assumptions made in their preparation and the range of revenue, operating cost, and credit assumptions considered;

(17) Financial statements for the past three years, or less if the Applicant has been in operation less than three years, that have been audited by an independent certified public accountant, including all associated notes, as well as interim financial statements and notes for the current fiscal year, of Applicant and parties providing Applicant's financial backing, together with business and financial interests of controlling or

commonly controlled organizations or persons, including parent, subsidiary and other affiliated corporations or partners of the Applicant;

(18) A copy of all legal opinions, and other material reports, analyses, and reviews related to the project;

(19) An independent engineering report prepared by an engineer with experience in the industry and familiarity with similar projects. The report should address: the project's siting and permitting, engineering and design, contractual requirements, environmental compliance, testing and commissioning and operations and maintenance;

(20) Credit history of the Applicant and, if appropriate, any party who owns or controls, by itself and/or through individuals in common or affiliated business entities, a five percent or greater interest in the project or the Applicant;

(21) A preliminary credit assessment for the project without a loan guarantee from a nationally recognized rating agency for projects where the estimated total Project Costs exceed \$25 million. For projects where the total estimated Project Costs are less than \$25 million and where conditions justify, in the sole discretion of the Secretary, DOE may require such an assessment;

(22) A list showing the status of and estimated completion date of Applicant's required project-related applications or approvals for Federal, state, and local permits and authorizations to site, construct, and operate the project;

(23) A report containing an analysis of the potential environmental impacts of the project that will enable DOE to assess whether the project will comply with all

applicable environmental requirements, and that will enable DOE to undertake and complete any necessary reviews under the National Environmental Policy Act of 1969;

(24) A listing and description of assets associated, or to be associated, with the project and any other asset that will serve as collateral for the Guaranteed Obligations, including appropriate data as to the value of the assets and the useful life of any physical assets. With respect to real property assets listed, an appraisal that is consistent with the “Uniform Standards of Professional Appraisal Practice,” promulgated by the Appraisal Standards Board of the Appraisal Foundation, and performed by licensed or certified appraisers, is required;

(25) An analysis demonstrating that, at the time of the Application, there is a reasonable prospect that Borrower will be able to repay the Guaranteed Obligations (including interest) according to their terms, and a complete description of the operational and financial assumptions and methodologies on which this demonstration is based;

(26) Written affirmation from an officer of the Eligible Lender or other Holder confirming that it is in good standing with DOE’s and other Federal agencies’ loan guarantee programs;

(27) A list of all of the requirements contained in this part and the solicitation and where in the Application these requirements are addressed;

(28) A statement from the Applicant that it believes that there is “reasonable prospect” that the Guaranteed Obligations will be fully paid from project revenue; and

(29) Any other information requested in the invitation to submit an Application or requests from DOE in order to clarify an Application;

(c) DOE will not consider any Application complete unless the Applicant has paid the First Fee and the Application is signed by the appropriate entity or entities with the authority to bind the Applicant to the commitments and representations made in the Application.

§ 609.7 Programmatic, Technical and Financial Evaluation of Applications.

(a) In reviewing completed Applications, and in prioritizing and selecting those to whom a Term Sheet should be offered, DOE will apply the criteria set forth in the Act, the applicable solicitation, and this part. Applications will be considered in a competitive process, i.e. each Application will be evaluated against other Applications responsive to the Solicitation. Greater weight will be given to applications that rely upon a smaller guarantee percentage, all else being equal. Concurrent with its review process, DOE will consult with the Secretary of the Treasury regarding the terms and conditions of the potential loan guarantee. Applications will be denied if:

(1) The project will be built or operated outside the United States;

(2) The project is not ready to be employed commercially in the United States, cannot yield a commercially viable product or service in the use proposed in the project, does not have the potential to be employed in other commercial projects in the United States, and is not or will not be available for further commercial use in the United States;

(3) The entity or person issuing the loan or other debt obligations subject to the loan guarantee is not an Eligible Lender or other Holder, as defined in § 609.11 of this part;

(4) The project is for demonstration, research, or development.

(5) The project does not avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases; or

(6) The Applicant will not provide an equity contribution.

(b) In evaluating Applications, DOE will consider the following factors:

(1) To what measurable extent the project avoids, reduces, or sequesters air pollutants or anthropogenic emissions of greenhouses gases;

(2) To what extent the new or significantly improved technology to be employed in the project, as compared to Commercial Technology in general use in the United States, is ready to be employed commercially in the United States, can be replicated, yields a commercial viable project or service in the use proposed in the project, has potential to be employed in other commercial projects in the United States, and is or will be available for further commercial use in the United States;

(3) To the extent that the new or significantly improved technology used in the project constitutes an important improvement in technology, as compared to Commercial Technology, used to avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases, and the Applicant has a plan to advance or assist in the advancement of that technology into the commercial marketplace;

(4) The extent to which the requested amount of the loan guarantee, and requested amount of Guaranteed Obligations are reasonable relative to the nature and scope of the project;

(5) The total amount and nature of the Eligible Project Costs and the extent to which Project Costs are funded by Guaranteed Obligations;

- (6) The likelihood that the project will be ready for full commercial operations in the time frame stated in the Application;
- (7) The amount of equity commitment to the project by the Applicant and other principals involved in the project;
- (8) Whether there is sufficient evidence that the Applicant will diligently pursue the project, including initiating and completing the project in a timely manner;
- (9) Whether and to what extent the Applicant will rely upon other Federal and non-Federal governmental assistance such as grants, tax credits, or other loan guarantees to support the financing, construction, and operation of the project and how such assistance will impact the project;
- (10) The feasibility of the project and likelihood that the project will produce sufficient revenues to service the project's debt obligations over the life of the loan guarantee and assure timely repayment of Guaranteed Obligations;
- (11) The levels of safeguards provided to the Federal government in the event of default through collateral, warranties, and other assurance of repayment described in the Application;
- (12) The Applicant's capacity and expertise to successfully operate the project, based on factors such as financial soundness, management organization, and the nature and extent of corporate and personal experience;
- (13) The ability of the applicant to ensure that the project will comply with all applicable laws and regulations, including all applicable environmental statutes and regulations;

(14) The levels of market, regulatory, legal, financial, technological, and other risks associated with the project and their appropriateness for a loan guarantee provided by DOE;

(15) Whether the Application contains sufficient information, including a detailed description of the nature and scope of the project and the nature, scope, and risk coverage of the loan guarantee sought to enable DOE to perform a thorough assessment of the project; and

(16) Such other criteria that DOE deems relevant in evaluating the merits of an Application.

(c) During the Application review process DOE may raise issues or concerns that were not raised during the Pre-Application review process where a Pre-Application was requested in the applicable solicitation.

(d) If DOE determines that a project may be suitable for a loan guarantee, DOE will notify the Applicant and Eligible Lender or other Holder in writing and provide them with a Term Sheet. If DOE reviews an Application and decides not to proceed further with the issuance of a Term Sheet, DOE will inform the Applicant in writing of the reason(s) for denial.

§ 609.8 Term Sheets and Conditional Commitments.

(a) DOE , after review and evaluation of the Application, additional information requested and received by DOE, potentially including a preliminary credit rating or credit assessment, and information obtained as the result of meeting with the Applicant and the Eligible Lender or other Holder, may offer to an Applicant and the Eligible Lender or

other Holder detailed terms and conditions that must be met, including terms and conditions that must be met by the Applicant and the Eligible Lender or other Holder.

(b) The terms and conditions required by DOE will be expressed in a written Term Sheet signed by a Contracting Officer and addressed to the Applicant and the Eligible Lender or other Holder, where appropriate. The Term Sheet will request that the Project Sponsor and the Eligible Lender or other Holder express agreement with the terms and conditions contained in the Term Sheet by signing the Term Sheet in the designated place. Each person signing the Term Sheet must be a duly authorized official or officer of the Applicant and Eligible Lender or other Holder. The Term Sheet will include an expiration date on which the terms offered will expire unless the Contracting Officer agrees in writing to extend the expiration date.

(c) The Applicant and/or the Eligible Lender or other Holder may respond to the Term Sheet offer in writing or may request discussions or meetings on the terms and conditions contained in the Term Sheet, including requests for clarifications or revisions. When DOE, the Applicant, and the Eligible Lender or other Holder agree on all of the final terms and conditions and all parties sign the Term Sheet, the Term Sheet becomes a Conditional Commitment. When and if all of the terms and conditions specified in the Conditional Commitment have been met, DOE and the Applicant may enter into a Loan Guarantee Agreement.

(d) DOE's obligations under each Conditional Commitment are conditional upon statutory authority having been provided in advance of the execution of the Loan Guarantee Agreement sufficient under FCRA and Title XVII for DOE to execute the Loan Guarantee Agreement, and either an appropriation has been made or a borrower has

paid into the Treasury sufficient funds to cover the full Credit Subsidy Cost for the loan guarantee that is the subject of the Conditional Commitment.

(e) The Applicant is required to pay fees to DOE to cover the Administrative Cost of Issuing a Loan Guarantee for the period of the Term Sheet through the closing of the Loan Guarantee Agreement (Second Fee).

§ 609.9 Closing On the Loan Guarantee Agreement.

(a) Subsequent to entering into a Conditional Commitment with an Applicant, DOE, after consultation with the Applicant, will set a closing date for execution of Loan Guarantee Agreement.

(b) By the closing date, the Applicant and the Eligible Lender or other Holder must have satisfied all of the detailed terms and conditions contained in the Conditional Commitment and other related documents and all other contractual, statutory, and regulatory requirements. If the Applicant and the Eligible Lender or other Holder has not satisfied all such terms and conditions by the closing date, the Secretary may, in his/her sole discretion, set a new closing date or terminate the Conditional Commitment.

(c) In order to enter into a Loan Guarantee Agreement at closing:

(1) DOE must have received authority in an appropriations act for the loan guarantee; and

(2) All other applicable statutory, regulatory, or other requirements must be fulfilled.

(d) Prior to, or on, the closing date, DOE will ensure that:

(1) Pursuant to section 1702(b) of the Act, DOE has received payment of the Credit Subsidy Cost of the loan guarantee, as defined in § 609.2 of this part from either (but not from a combination) of the following:

(i) A Congressional appropriation of funds; or

(ii) A payment from the Borrower.

(2) Pursuant to section 1702(h) of the Act, DOE has received from the Borrower the First and Second Fees and, if applicable, the Third fee, or portions thereof, for the Administrative Cost of Issuing the Loan Guarantee, as specified in the Loan Guarantee Agreement;

(3) OMB has reviewed and approved DOE's calculation of the Credit Subsidy Cost of the loan guarantee.;

(4) The Department of the Treasury has been consulted as to the terms and conditions of the Loan Guarantee Agreement;

(5) The Loan Guarantee Agreement and related documents contain all terms and conditions DOE deems reasonable and necessary to protect the interest of the United States; and

(6) All conditions precedent specified in the Conditional Commitment are either satisfied or waived by a Contracting Officer and all other applicable contractual, statutory, and regulatory requirements are satisfied.

(e) Not later than the period approved in writing by the Contracting Officer, which may not be less than 30 days prior to the closing date, the Applicant must provide in writing updated project financing information if the terms and conditions of the financing arrangements changed between execution of the Conditional Commitment and that date. The Conditional Commitment must be updated to reflect the revised terms and conditions.

(f) Where the total Project Costs for an Eligible Project are projected to exceed \$25 million, the Applicant must provide a credit rating from a nationally recognized rating agency reflecting the revised Conditional Commitment for the project without a Federal guarantee. Where total Project Costs are projected to be less than \$25 million, the Secretary may, on a case-by-case basis, require a credit rating. If a rating is required, an updated rating must be provided to the Secretary not later than 30 days prior to closing.

(g) Changes in the terms and conditions of the financing arrangements will affect the Credit Subsidy Cost for the Loan Guarantee Agreement. DOE may postpone the expected closing date pursuant to any changes submitted under paragraph (e) and (f) of this section. In addition, DOE may choose to terminate the Conditional Commitment.

§ 609.10 Loan Guarantee Agreement.

(a) Only a Loan Guarantee Agreement executed by a duly authorized DOE Contracting Officer can contractually obligate DOE to guarantee loans or other debt obligations.

(b) DOE is not bound by oral representations made during the Pre-Application stage, if Pre-Applications were solicited, or Application stage, or during any negotiation process.

(c) Except if explicitly authorized by an Act of Congress, no funds obtained from the Federal Government, or from a loan or other instrument guaranteed by the Federal Government, may be used to pay for Credit Subsidy Costs, administrative fees, or other fees charged by or paid to DOE relating to the Title XVII program or any loan guarantee there under.

(d) Prior to the execution by DOE of a Loan Guarantee Agreement, DOE must ensure that the following requirements and conditions, which must be specified in the Loan Guarantee Agreement, are satisfied:

(1) The project qualifies as an Eligible Project under the Act and is not a research, development, or demonstration project or a project that employs Commercial Technologies in service in the United States;

(2) The project will be constructed and operated in the United States, the employment of the new or significantly improved technology in the project has the potential to be replicated in other commercial projects in the United States, and this technology is or is likely to be available in the United States for further commercial application;

(3) The face value of the debt guaranteed by DOE is limited to no more than 80 percent of total Project Costs.

(4) (i) Where DOE guarantees 100 percent of the Guaranteed Obligation, the loan shall be funded by the Federal Financing Bank;

(ii) Where DOE guarantees more than 90 percent of the Guaranteed Obligation, the guaranteed portion cannot be separated from or “stripped” from the non-guaranteed portion of the Guaranteed Obligation if the loan is participated, syndicated or otherwise resold in the secondary market;

(iii) Where DOE guarantees 90 percent or less of the Guaranteed Obligation, the guaranteed portion may be separated from or “stripped” from the non-guaranteed portion of the Guaranteed Obligation, if the loan is participated, syndicated or otherwise resold in the secondary debt market;

(5) The Borrower and other principals involved in the project have made or will make a significant equity investment in the project;

(6) The Borrower is obligated to make full repayment of the principal and interest on the Guaranteed Obligations and other project debt over a period of up to the lesser of 30 years or 90 percent of the projected useful life of the project’s major physical assets, as calculated in accordance with generally accepted accounting principles and practices. The non-guaranteed portion of any Guaranteed Obligation must be repaid on a pro-rata basis, and may not be repaid on a shorter amortization schedule than the guaranteed portion;

(7) The loan guarantee does not finance, either directly or indirectly, tax-exempt debt obligations, consistent with the requirements of section 149(b) of the Internal Revenue Code;

(8) The amount of the loan guaranteed, when combined with other funds committed to the project, will be sufficient to carry out the project, including adequate contingency funds;

(9) There is a reasonable prospect of repayment by Borrower of the principal of and interest on the Guaranteed Obligations and other project debt;

(10) The Borrower has pledged project assets and other collateral or surety, including non project-related assets, determined by DOE to be necessary to secure the repayment of the Guaranteed Obligations;

(11) The Loan Guarantee Agreement and related documents include detailed terms and conditions necessary and appropriate to protect the interest of the United States in the case of default, including ensuring availability of all the intellectual property rights, technical data including software, and physical assets necessary for any person or entity, including DOE, to complete, operate, convey, and dispose of the defaulted project;

(12) The interest rate on any Guaranteed Obligation is determined by DOE, after consultation with the Treasury Department, to be reasonable, taking into account the range of interest rates prevailing in the private sector for similar obligations of comparable risk guaranteed by the Federal government;

(13) Any Guaranteed Obligation is not subordinate to any loan or other debt obligation and is in a first lien position on all assets of the project and all additional collateral pledged as security for the Guaranteed Obligations and other project debt;

(14) There is satisfactory evidence that Borrower and Eligible Lenders or other Holders are willing, competent, and capable of performing the terms and conditions of the Guaranteed Obligations and other debt obligation and the Loan Guarantee Agreement, and will diligently pursue the project;

(15) The Borrower has made the initial (or total) payment of fees for the Administrative Cost of Issuing a Loan Guarantee for the construction and operational phases of the project (Third Fee), as specified in the Conditional Commitment;

(16) The Eligible Lender, other Holder or servicer has taken and is obligated to continue to take those actions necessary to perfect and maintain liens on assets which are pledged as collateral for the Guaranteed Obligation;

(17) If Borrower is to make payment in full for the Credit Subsidy Cost of the loan guarantee pursuant to section 1702(b)(2) of the Act, such payment must be received by DOE prior to, or at the time of, closing;

(18) DOE or its representatives have access to the project site at all reasonable times in order to monitor the performance of the project;

(19) DOE, the Eligible Lender, or other Holder and Borrower have reached an agreement as to the information that will be made available to DOE and the information that will be made publicly available;

(20) The prospective Borrower has filed applications for or obtained any required regulatory approvals for the project and is in compliance, or promptly will be in compliance, where appropriate, with all Federal, state, and local regulatory requirements;

(21) Borrower has no delinquent Federal debt, including tax liabilities, unless the delinquency has been resolved with the appropriate Federal agency in accordance with the standards of the Debt Collection Improvement Act of 1996;

(22) The Loan Guarantee Agreement contains such other terms and conditions as DOE deems reasonable and necessary to protect the interest of the United States; and

(23) (i) The Lender is an Eligible Lender, as defined in § 609.2 of this part, and meets DOE's lender eligibility and performance requirement contained in §§ 609.11 (a) and (b) of this part; and

(ii) the servicer meets the servicing performance requirements of § 609.11(c) of this part.

(e) The Loan Guarantee Agreement must provide that, in the event of a default by the Borrower:

(1) Interest accrues on the Guaranteed Obligations at the rate stated in the Loan Guarantee Agreement or Loan Agreement , until DOE makes full payment of the defaulted Guaranteed Obligations and, except when debt is funded through the Federal Financing Bank, DOE is not required to pay any premium, default penalties, or prepayment penalties;

(2) Upon payment of the Guaranteed Obligations by DOE, DOE is subrogated to the rights of the Holders of the debt, including all related liens, security, and collateral rights and has superior rights in and to the property acquired from the recipient of the payment as provided in § 609.15 of this part.

(3) The Eligible Lender or other servicer acting on DOE's behalf is obligated to take those actions necessary to perfect and maintain liens on assets which are pledged as collateral for the Guaranteed Obligations.

(4) The holder of pledged collateral is obligated to take such actions as DOE may reasonably require to provide for the care, preservation, protection, and maintenance of such collateral so as to enable the United States to achieve maximum recovery upon default by Borrower on the Guaranteed Obligations.

(f) The Loan Guarantee Agreement must contain audit provisions which provide, in substance, as follows:

(1) The Eligible Lender or other Holder or other party servicing the Guaranteed Obligations, as applicable, and the Borrower, must keep such records concerning the project as are necessary to facilitate an effective and accurate audit and performance evaluation of the project as required in § 609.17 of this part.

(2) DOE and the Comptroller General, or their duly authorized representatives, must have access, for the purpose of audit and examination, to any pertinent books, documents, papers, and records of the Borrower, Eligible Lender or other Holder, or other party servicing the Guaranteed Obligations, as applicable. Examination of records may be made during the regular business hours of the Borrower, Eligible Lender or other Holder, or other party servicing the Guaranteed Obligations, or at any other time mutually convenient as required in § 609.17 of this part.

(g)(1) An Eligible Lender or other Holder may sell, assign or transfer a Guaranteed Obligation to another Eligible Lender that meets the requirements of § 609.11 of this part. Such Eligible Lender to which a Guaranteed Obligation is assigned

or transferred, is required to fulfill all servicing, monitoring, and reporting requirements contained in the Loan Guarantee Agreement and these regulations if the transferring Eligible Lender was forming these functions and transfer such functions to the new Eligible Lender. Any assignment or transfer, however, of the servicing, monitoring, and reporting functions must be approved by DOE in writing in advance of such assignment.

(2) The Secretary, or the Secretary's designee or contractual agent, for the purpose of identifying Holders with the right to receive payment under the guarantees shall include in the Loan Guarantee Agreement or related documents a procedure for tracking and identifying Holders of Guarantee Obligations. These duties usually will be performed by the servicer. Any contractual agent approved by the Secretary to perform this function cannot transfer or assign this responsibility without the prior written consent of the Secretary.

§ 609.11 Lender Eligibility and Servicing Requirements.

(a) An Eligible Lender shall meet the following requirements:

(1) Not be debarred or suspended from participation in a Federal government contract (under 48 CFR part 9.4) or participation in a non-procurement activity (under a set of uniform regulations implemented for numerous agencies, such as DOE, at 2 CFR Part 180);

(2) Not be delinquent on any Federal debt or loan;

(3) Be legally authorized to enter into loan guarantee transactions authorized by the Act and these regulations and is in good standing with DOE and other Federal agency loan guarantee programs;

(4) Be able to demonstrate, or has access to, experience in originating and servicing loans for commercial projects similar in size and scope to the project under consideration; and

(5) Be able to demonstrate experience or capability as the lead lender or underwriter by presenting evidence of its participation in large commercial projects or energy-related projects or other relevant experience; or

(6) Be the Federal Financing Bank.

(b) When performing its duties to review and evaluate a proposed Eligible Project prior to the submission of a Pre-Application or Application, as appropriate, by the Project Sponsor through the execution of a Loan Guarantee Agreement, the Eligible Lender or DOE if loans are funded by the Federal Financing Bank, shall exercise the level of care and diligence that a reasonable and prudent lender would exercise when reviewing, evaluating and disbursing a loan made by it without a Federal guarantee.

(c) The servicing duties shall be performed by the Eligible Lender, DOE or other servicer if approved by the Secretary. When performing the servicing duties the Eligible Lender, DOE or other servicer shall exercise the level of care and diligence that a reasonable and prudent lender would exercise when servicing a loan made without a Federal guarantee, including:

(1) During the construction period, enforcing all of the conditions precedent to all loan disbursements, as provided in the Loan Guarantee Agreement, Loan Agreement and related documents;

(2) During the operational phase, monitoring and servicing the Debt Obligations and collection of the outstanding principal and accrued interest as well as ensuring that the collateral package securing the Guaranteed Obligations remains uncompromised; and

(3) As specified by DOE, providing annual or more frequent financial and other reports on the status and condition of the Guaranteed Obligations and the Eligible Project, and promptly notifying DOE if it becomes aware of any problems or irregularities concerning the Eligible Project or the ability of the Borrower to make payment on the Guaranteed Obligations or other debt obligations.

(c) With regard to partial guarantees, even though DOE may in part rely on the Eligible Lender or other servicer to service and monitor the Guaranteed Obligation, DOE will also conduct its own independent monitoring and review of the Eligible Project.

§ 609.12 Project Costs.

(a) Before entering into a Loan Guarantee Agreement, DOE shall determine the estimated Project Costs for the project that is the subject of the agreement. To assist the Department in making that determination, the Applicant must estimate, calculate and record all such costs incurred in the design, engineering, financing, construction, startup, commissioning and shakedown of the project in accordance with generally accepted accounting principles and practices. Among other things, the Applicant must calculate the sum of necessary, reasonable and customary costs that it has paid and expects to pay, which are directly related to the project, including costs for escalation and contingencies, to estimate the total Project Costs.

(b) Project Costs include:

(1) Costs of acquisition, lease, or rental of real property, including engineering fees, surveys, title insurance, recording fees, and legal fees incurred in connection with land acquisition, lease or rental, site improvements, site restoration, access roads, and fencing;

(2) Costs of engineering, architectural, legal and bond fees, and insurance paid in connection with construction of the facility; and materials, labor, services, travel and transportation for facility design, construction, startup, commissioning and shakedown;

(3) Costs of equipment purchases;

(4) Costs to provide equipment, facilities, and services related to safety and environmental protection;

(5) Financial and legal services costs, including other professional services and fees necessary to obtain required licenses and permits and to prepare environmental reports and data;

(6) The cost of issuing project debt, such as fees, transaction and legal costs and other normal charges imposed by Eligible Lenders and other Holders;

(7) Costs of necessary and appropriate insurance and bonds of all types;

(8) Costs of design, engineering, startup, commissioning and shakedown;

(9) Costs of obtaining licenses to intellectual property necessary to design, construct, and operate the project;

(10) A reasonable contingency reserve for cost overruns during construction; and

(11) Capitalized interest necessary to meet market requirements, reasonably required reserve funds and other carrying costs during construction; and

(12) Other necessary and reasonable costs.

(c) Project Costs do not include:

(1) Fees and commissions charged to Borrower, including finder's fees, for obtaining Federal or other funds;

(2) Parent corporation or other affiliated entity's general and administrative expenses, and non-project related parent corporation or affiliated entity assessments, including organizational expenses;

(3) Goodwill, franchise, trade, or brand name costs;

(4) Dividends and profit sharing to stockholders, employees, and officers;

(5) Research, development, and demonstration costs of readying the innovative energy or environmental technology for employment in a commercial project;

(6) Costs that are excessive or are not directly required to carry out the project, as determined by DOE, including but not limited to the cost of hedging instruments;

(7) Expenses incurred after startup, commissioning, and shakedown before the facility has been placed in service;

(8) Borrower-paid Credit Subsidy Costs and Administrative Costs of Issuing a Loan Guarantee; and

(9) Operating costs.

§ 609.13 Principal and Interest Assistance Contract.

With respect to the guaranteed portion of any Guaranteed Obligation, and subject to the availability of appropriations, DOE may enter into a contract to pay Holders, for and on behalf of Borrower, from funds appropriated for that purpose, the principal and interest charges that become due and payable on the unpaid balance of the guaranteed portion of the Guaranteed Obligation, if DOE finds that:

(a) The Borrower:

(1) Is unable to make the payments and is not in default; and

(2) Will, and is financially able to, continue to make the scheduled payments on the remaining portion of the principal and interest due under the non-guaranteed portion of the debt obligation, if any, and other debt obligations of the project, or an agreement, approved by DOE, has otherwise been reached in order to avoid a payment default on non-guaranteed debt.

(b) It is in the public interest to permit Borrower to continue to pursue the purposes of the project;

(c) In paying the principal and interest, the Federal government expects a probable net benefit to the Government will be greater than that which would result in the event of a default;

(d) The payment authorized is no greater than the amount of principal and interest that Borrower is obligated to pay under the terms of the Loan Guarantee Agreement; and

(e) Borrower agrees to reimburse DOE for the payment (including interest) on terms and conditions that are satisfactory to DOE and executes all written contracts required by DOE for such purpose.

§ 609.14 Full Faith and Credit and Incontestability.

The full faith and credit of the United States is pledged to the payment of all Guaranteed Obligations issued in accordance with this part with respect to principal and interest. Such guarantee shall be conclusive evidence that it has been properly obtained; that the underlying loan qualified for such guarantee; and that, but for fraud or material misrepresentation by the Holder, such guarantee will be presumed to be valid, legal, and enforceable.

§ 609.15 Default, Demand, Payment, and Collateral Liquidation.

(a) In the event that the Borrower has defaulted in the making of required payments of principal or interest on any portion of a Guaranteed Obligation, and such default has not been cured within the period of grace provided in the Loan Guarantee Agreement and/or the Loan Agreement, the Eligible Lender or other Holder, or nominee or trustee empowered to act for the Eligible Lender or other Holder (referred to in this

section collectively as “Holder”), may make written demand upon the Secretary for payment pursuant to the provisions of the Loan Guarantee Agreement.

(b) In the event that the Borrower is in default as a result of a breach of one or more of the terms and conditions of the Loan Guarantee Agreement, note, mortgage, Loan Agreement, or other contractual obligations related to the transaction, other than the Borrower’s obligation to pay principal or interest on the Guaranteed Obligation, as provided in paragraph (a) of this section, the Holder will not be entitled to make demand for payment pursuant to the Loan Guarantee Agreement, unless the Secretary agrees in writing that such default has materially affected the rights of the parties, and finds that the Holder should be entitled to receive payment pursuant to the Loan Guarantee Agreement.

(c) In the event that the Borrower has defaulted as described in paragraph (a) of this section and such default is not cured during the grace period provided in the Loan Guarantee Agreement, the Secretary shall notify the U.S. Attorney General and may cause the principal amount of all Guaranteed Obligations, together with accrued interest thereon, and all amounts owed to the United States by Borrower pursuant to the Loan Guarantee Agreement, to become immediately due and payable by giving the Borrower written notice to such effect (without the need for consent or other action on the part of the Holders of the Guaranteed Obligations). In the event the Borrower is in default as described in paragraph (b) of this section, where the Secretary determines in writing that such a default has materially affected the rights of the parties, the Borrower shall be given the period of grace provided in the Loan Guarantee Agreement to cure such default. If the default is not cured during the period of grace, the Secretary may cause the principal amount of all Guaranteed Obligations, together with accrued interest thereon, and all

amounts owed to the United States by Borrower pursuant to the Loan Guarantee Agreement, to become immediately due and payable by giving the Borrower written notice to such effect (without any need for consent or other action on the part of the Holders of the Guaranteed Obligations).

(d) No provision of this regulation shall be construed to preclude forbearance by the Holder with the consent of the Secretary for the benefit of the Borrower.

(e) Upon the making of demand for payment as provided in paragraph (a) or (b) of this section, the Holder shall provide, in conjunction with such demand or immediately thereafter, at the request of the Secretary, the supporting documentation specified in the Loan Guarantee Agreement and any other supporting documentation as may reasonably be required to justify such demand. .

(f) Payment as required by the Loan Guarantee Agreement of the Guaranteed Obligation shall be made 60 days after receipt by the Secretary of written demand for payment, provided that the demand complies with the terms of the Loan Guarantee Agreement. The Loan Guarantee Agreement shall provide that interest shall accrue to the Holder at the rate stated in the Loan Guarantee Agreement until the Guaranteed Obligation has been fully paid by the Federal government.

(g) The Loan Guarantee Agreement shall provide that, upon payment of the Guaranteed Obligations, the Secretary shall be subrogated to the rights of the Holders and shall have superior rights in and to the property acquired from the Holders. The Holder shall transfer and assign to the Secretary all rights held by the Holder of the Guaranteed Obligation. Such assignment shall include all related liens, security, and collateral rights to the extent held by the Holder.

(h) Where the Loan Guarantee Agreement so provides, the Eligible Lender or other Holder, or other servicer, as appropriate, and the Secretary may jointly agree to a plan of liquidation of the assets pledged to secure the Guaranteed Obligation.

(i) Where payment of the Guaranteed Obligation has been made and the Eligible Lender or other Holder or other servicer has not undertaken a plan of liquidation, the Secretary, in accordance with the rights received through subrogation and acting through the U.S. Attorney General, may seek to foreclose on the collateral assets and/or take such other legal action as necessary for the protection of the Government.

(j) If the Secretary is awarded title to collateral assets pursuant to a foreclosure proceeding, the Secretary may take action to complete, maintain, operate, or lease the project facilities, or otherwise dispose of any property acquired pursuant to the Loan Guarantee Agreement or take any other necessary action which the Secretary deems appropriate, in order that the original goals and objectives of the project will, to the extent possible, be realized.

(k) In addition to foreclosure and sale of collateral pursuant thereto, the U.S. Attorney General shall take appropriate action in accordance with rights contained in the Loan Guarantee Agreement to recover costs incurred by the Government as a result of the defaulted loan or other defaulted obligation. Any recovery so received by the U.S. Attorney General on behalf of the Government shall be applied in the following manner: First to the expenses incurred by the U.S. Attorney General and DOE in effecting such recovery; second, to reimbursement of any amounts paid by DOE as a result of the defaulted obligation; third, to any amounts owed to DOE under related principal and interest assistance contracts; and fourth, to any other lawful claims held by the

Government on such process. Any sums remaining after full payment of the foregoing shall be available for the benefit of other parties lawfully entitled to claim them.

(l) If there was a partial guarantee of the Guaranteed Obligation by DOE, the remaining funds received as a result of the liquidation of project assets may, if so agreed in advance, be applied as follows:

(1) First, to the payment of reasonable and customary fees and expenses incurred in the liquidation; and

(2) Second, distributed among the Holders of the debt on no greater than a pro rata share basis.

(m) No action taken by the Eligible Lender or other Holder or other servicer in the liquidation of any pledged assets will affect the rights of any party, including the Secretary, having an interest in the loan or other debt obligations, to pursue, jointly or severally, to the extent provided in the Loan Guarantee Agreement, legal action against the Borrower or other liable parties, for any deficiencies owing on the balance of the Guaranteed Obligations or other debt obligations after application of the proceeds received upon liquidation.

(n) In the event that the Secretary considers it necessary or desirable to protect or further the interest of the United States in connection with the liquidation of collateral or recovery of deficiencies due under the loan, the Secretary will take such action as may be appropriate under the circumstances.

(o) Nothing in this part precludes the Secretary from purchasing the Holder's interest in the project upon liquidation.

§ 609.16 Perfection of Liens and Preservation of Collateral.

(a) The Loan Guarantee Agreement and other documents related thereto shall provide that:

(1) The Eligible Lender or, or DOE in conjunction with the Federal Financing Bank where the loan is funded by the Federal Financing Bank, or other Holder or other servicer will take those actions necessary to perfect and maintain liens, as applicable, on assets which are pledged as collateral for the guaranteed portion of the loan; and

(2) Upon default by the Borrower, the holder of pledged collateral shall take such actions as the Secretary may reasonably require to provide for the care, preservation, protection, and maintenance of such collateral so as to enable the United States to achieve maximum recovery from the pledged assets. The Secretary shall reimburse the holder of collateral for reasonable and appropriate expenses incurred in taking actions required by the Secretary. Except as provided in § 609.15, no party may waive or relinquish, without the consent of the Secretary, any collateral securing the Guaranteed Obligation to which the United States would be subrogated upon payment under the Loan Guarantee Agreement.

(b) In the event of a default, the Secretary may enter into such contracts as the Secretary determines are required to preserve the collateral. The cost of such contracts may be charged to the Borrower.

§ 609.17 Audit and Access to Records.

(a) The Loan Guarantee Agreement and related documents shall provide that:

(1) The Eligible Lender, or DOE in conjunction with the Federal Financing Bank where loans are funded by the Federal Financing Bank or other Holder or other party servicing the Guaranteed Obligations, as applicable, and the Borrower, shall keep

such records concerning the project as is necessary, including the Pre-Application, Application, Term Sheet, Conditional Commitment, Loan Guarantee Agreement, Credit Agreement, mortgage, note, disbursement requests and supporting documentation, financial statements, audit reports of independent accounting firms, lists of all project assets and non-project assets pledged as security for the Guaranteed Obligations, all off-take and other revenue producing agreements, documentation for all project indebtedness, income tax returns, technology agreements, documentation for all permits and regulatory approvals and all other documents and records relating to the Eligible Project, as determined by the Secretary, to facilitate an effective audit and performance evaluation of the project; and

(2) The Secretary and the Comptroller General, or their duly authorized representatives, shall have access, for the purpose of audit and examination, to any pertinent books, documents, papers and records of the Borrower, Eligible Lender or DOE or other Holder or other party servicing the Guaranteed Obligation, as applicable. Such inspection may be made during regular office hours of the Borrower, Eligible Lender or DOE or other Holder, or other party servicing the Eligible Project and the Guaranteed Obligations, as applicable, or at any other time mutually convenient.

(b) The Secretary may from time to time audit any or all items of costs included as Project Costs in statements or certificates submitted to the Secretary or the servicer or otherwise, and may exclude or reduce the amount of any item which the Secretary determines to be unnecessary or excessive, or otherwise not to be an item of Project Costs. The Borrower will make available to the Secretary all books and records and other data available to the Borrower in order to permit the Secretary to carry out such audits.

The Borrower should represent that it has within its rights access to all financial and operational records and data relating to Project Costs, and agrees that it will, upon request by the Secretary, exercise such rights in order to make such financial and operational records and data available to the Secretary. In exercising its rights hereunder, the Secretary may utilize employees of other Federal agencies, independent accountants, or other persons.

§ 609.18 Deviations.

To the extent that such requirements are not specified by the Act or other applicable statutes, DOE may authorize deviations on an individual request basis from the requirements of this part upon a finding that such deviation is essential to program objectives and the special circumstances stated in the request make such deviation clearly in the best interest of the Government. DOE will consult with OMB and the Secretary of the Treasury before DOE grants any deviation that would constitute a substantial change in the financial terms of the Loan Guarantee Agreement and related documents. Any deviation, however, that was not captured in the Credit Subsidy Cost will require either additional fees or discretionary appropriations. A recommendation for any deviation shall be submitted in writing to DOE. Such recommendation must include a supporting statement, which indicates briefly the nature of the deviation requested and the reasons in support thereof.